Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

serve
943
117

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D.C.

LIBRARY
CURRENT SERIAL RECORD
APR 26 1957
U. S. DEPARTMENT OF AGRICULTURE

FD 14-56 December 27, 1956

PER CAPITA CONSUMPTION OF DAIRY PRODUCTS IN 1955

SUMMARY

For the third consecutive year the estimated per capita consumption of milk and dairy products showed an increase on a whole milk equivalent basis. Of the 17 reporting countries, 11 showed increases in consumption in 1955 while 5 reported declines from 1954 while one showed no change in per capita use. The gain in consumption was made while milk production showed a slight decline, primarily because of drought conditions in European countries.

Contrary to last year when the increase registered was due primarily to butter consumption, the increase in whole milk equivalent in 1955 was spread over all products except dry whole milk.

On the country product basis, Ireland was the leading consumer of dairy products with a whole milk equivalent consumption rate per capita of 1489 pounds. Finland remained in second place. The United States, although recording a slight gain from 1954, showed no change from its 14th position.

Finland was the leading consumer of fluid milk in 1955. The United States, by increasing consumption of fluid milk took 7th place ahead of Austria. New Zealand remained the leading consumer of butter in 1955, again followed closely by Ireland. The United States was again 15th in butter consumption per capita.

In cheese consumption per person the United States was 11th while Switzerland was the number 1 consuming nation in 1955. Only in processed milk items was the United States a leader in per capita consumption. The United States was first in canned milk use and consumption of dried milks. Canada held the 2nd position in both items.

By Terrence W. McCabe, Regina Murray and William L. Scholz - based in part on Foreign Service Reports.

For the third consecutive year the per capita consumption of milk and dairy products in primary dairy countries showed an overall increase. In 1955 consumption of dairy products in terms of whole milk equivalent in Austria, Belgium, Denmark, Finland, France, The Federal Republic of Germany, Ireland, Italy, The Netherlands, Norway, Sweden, Switzerland, United Kingdom, Australia, New Zealand, Canada and the United States amounted to 722 pounds per person, an increase of 7 pounds over the 1954 level. Of the 17 countries, 11 showed increases in milk consumption from 1954, 5 showed losses, and 1 remained unchanged.

While consumption on a whole milk equivalent basis was showing a gain, milk production was declining. In 1955 total milk production in the 17 countries was estimated at 356.7 billion compared with 358.6 billion pounds in the previous year. This decline was due entirely to drought conditions in Europe during the latter part of 1955. The 13 European countries reported 4 billion pounds less milk produced in 1955 than in 1954. Gains registered by the other countries outside of Europe were not sufficient to counterbalance this large loss in production.

The gain in consumption was spread over all of the products except dry whole milk, which showed no gain between 1954 and 1955. As was the case between 1953 and 1954, butter was responsible for the largest part of the net increase. Fluid milk use, particularly outside of Europe, also contributed to net gain during 1955. In Europe, as a whole, fluid milk, butter, and cheese, declined slightly; dry milk showed no change in consumption between 1954 and 1955. A slight gain was registered in the consumption of canned milk. This was due to a net increase in production which more than offset a small increase in net exports from the area. In European countries from which canned milk data are available, condensed and evaporated milk production gained over 300 million pounds in 1955, whereas net exports from the area showed an increase of only 74 million pounds. The Republic of Germany showed the largest part of the production gain with the output of the condensed milks in 1955 being more than 25 percent above the 1954 level.

As was the case in 1954, only the United Kingdom and Belgium of the 17 countries were net importers of dairy products. In 1955 the United Kingdom imported 285 pounds of dairy products per person on a whole milk equivalent basis, compared to 260 pounds in 1954. Belgium, on the other hand, showed a slight decline in its import requirements; in 1954 it required 70 pounds per person whole milk equivalent of dairy products over production, but in 1955 this had declined to 49 pounds per person.

A tabular comparison of milk production and consumption of milk and dairy products in 1954 and 1955 for the 17 countries appears in the appendix.

Between 1954 and 1955, 11 of the countries registered gains in consumption of dairy products on a whole milk equivalent basis, while 5 showed declines and 1, The Federal Republic of Germany, showed no change.

Ireland was again the leading consumer of dairy products in terms of whole milk equivalent with a reported 1,489 pounds consumed per person in 1955, a gain of 66 pounds from the 1954 level. The net gain was due primarily to an increase of just over 2 pounds of butter per capita. There was also an increase of 0.7 pounds of cheese and 3 pounds of fluid milk per capita.

Finland, a newcomer to the list of countries, took the second position, showing a whole milk equivalent consumption of 1,457 pounds per person in 1955; the gain of 65 pounds from 1954 consumption was second only to Ireland's net gain. The increase in Finland was due largely to increased fluid use and butter consumption. New Zealand remained in third place with 1,353 pounds, whole milk equivalent, per capita in 1955, more than 200 pounds greater than Sweden, the 4th place country.

Despite the fact that Sweden, Australia, Belium, and Switzerland registered losses in consumption from 1954 while Canada, Norway and Denmark reported gains, there was no change in the order of the countries from 4th to 10th places. The United Kingdom, however, reporting a gain of 17 pounds per capita to 753 pounds, whole milk equivalent, in 1955, took over the 11th position from France, which showed a decline of 11 pounds to 736 pounds per person.

There was one other change. The United States dropped to 15th place, even though gaining 10 pounds, when Austria rose 23 pounds to match Germany's figure of 710 pounds per person, whole milk equivalent, in 1955.

The rank order of countries in the percapita consumption of milk and dairy products on a whole milk equivalent basis in 1954 and 1955 are shown in Table 1.

Table 1

Per Capita Consumption of Milk and Dairy Products in Terms of Whole Milk Equivalent in 17 countries, 1954 and 1955

	1954		1955	
Rank	Country	Per capita consumption	Country	Per capita consumption
		Pounds		Pounds
1	Ireland	1,423	Ireland	1,489
2	Finland	1,392	Finland	1,457
3	New Zealand	1,344	New Zealand	1,353
4	Sweden	1,150	Sweden	1,131
5	Australia	1,083	Australia	1,032
6	Canada	1,019	Canada	1,027
7	Belgium	996	Belgium	983
8	Switzerland	976	Switzerland	967
9	Norway	923	Norway	934
10	Denmark	835	Denmark	854
11	France	747	United Kingdom	753
12	United Kingdom	736	France	736
13	German Republic	710	German Republic	710
14	United States	690	Austria	710
15	Austria	687	United States	700
16	Netherlands	641	Netherlands	658
17	Italy	309	Italy	319

Fluid milk, which in most of the countries listed includes the whole-milk equivalent of ice cream consumed, is the largest single factor in the consumption picture, taking approximately three-eighths of the whole milk equivalent consumption in the 17 countries. During 1955, nine countries showed increases in the consumption of fluid milk over 1954; seven countries registered declines and one, Norway, the second ranking country, showed no change at 522 pounds per person.

Finland was ranked first in 1954 and 1955. The 653 pounds per person reported in 1955 represents an increase of 34 pounds, the largest gain reported, and more than double the gain of 15 pounds listed for Denmark, the 10th ranking country in fluid use.

Despite the rather even division between gains and losses reported in fluid milk consumption between 1954 and 1955 there was no other change in the order of the countries. The United States with 400 pounds per person, 48 of which is the fluid equivalent of ice cream, showed a gain of 5 pounds over 1954 and followed Austria, in 7th position. Austria's fluid consumption showed the largest decline, falling 14 pounds between 1954 and 1955 to 405 pounds per person.

The ranks of the 17 countries in fluid milk consumption per person in 1954 and 1955 are shown in table 2.

Table 2

Per Capita Consumption of Fluid Milk in 17 Countries, 1954 and 1955

Rank	1954 Country	1954 Per capita consumption	1955 Country	1955 Per capita consumption
		Pounds		Pounds
1	Finland	629	Finland	653
2	Norway	522	Norway	522
3	Sweden	495	Sweden	487
4	New Zealand	476	New Zealand	466
5	Switzerland	470	Switzerland	458
6	Canada	427	Canada	436
7	Austria	419	Austria	405
8	United States	395	United States	400
9	Ireland	368	Ireland	371
10	Denmark	353	Denmark	368
11	United Kingdom	342	United Kingdom	344
12	Netherlands	339	Netherlands	329
13	Australia	277	Australia	279
14	German Republic	267	German Republic	263
15	Belgium	208	Belgium	210
16	France	195	France	193
17	Italy	114	Italy	115

Only New Zealand, the leading butter consuming nation, showed no change in consumption between 1954 and 1955; in both years per capita consumption of 44.9 pounds was recorded.

Of the other 16 countries, 8 showed gains and 8 losses between 1954 and 1955, but only one change resulted. With both Switzerland and the United Kingdom laying claim to 11th place in 1954 as a result of 12.0 pounds of butter consumed per person, the United Kingdom took definite possession of the rank in 1955 with a gain of 0.7 pounds while Switzerland was losing 0.1 pounds per person.

Ireland, which obtains more than two-thirds of its whole milk equivalent consumption in the form of butter, showed the largest per capita gain between 1954 and 1955, 2.1 pounds. The 43.7 pounds per person reported by Ireland was more than sufficient for it to maintain second place. Finland showed the next largest gain, a total of 1.8 pounds per person, to 35.8 pounds per capita in 1955; this retained third place for Finland ahead of Australia, which reported the largest decline, 1.8 pounds per person, between 1954 and 1955. Austria recorded a gain of 1.2 pounds to 10.5 pounds per person in 1955 and maintained 13th place.

Despite the fact that it recorded a gain of 0.2 pounds to 8.9 pounds per person in 1955, the United States remained only the 15th butter consumer on a per capita basis. The United States has a per capita consumption of less than one-half that of neighboring Canada which, in 7th place, reported 20.6 pounds for 1955.

The ranks of the 17 countries in per capita butter consumption in 1954 and 1955 are shown in Table 3.

Table 3

Per Capita Consumption of Butter in 17 Countries, 1954 and 1955

Rank	1954 Country	1954 Per capita consumption	1955 Country	1955 Per capita consumption
		Pounds		Pounds
1	New Zealand	44.9	New Zealand	44.9
2	Ireland	41.6	Ireland	43.7
3	Finland	34.0	Finland	35.8
4	Australia	32.8	Australia	31.0
5	Belgium	24.5	Belgium	24.1
6	Sweden	24.5	Sweden	24.0
7	Canada	20.7	Canada	20.6
8	Denmark	19.1	Denmark	18.7
9	German Republic	15.3	German Republic	15.2
10	France	15.0	France	14.8
11	Switzerland	14.0	United Kingdom	14.7
12	United Kingdom	14.0	Switzerland	13.9
13	Austria	9.3	Austria	10.5
14	Norway	9.0	Norway	9.3
15	United States	8.7	United States	8.9
16	Netherlands	6.1	Netherlands	6.5
17	Italy	2.9	Italy	3.2

While 10 of the countries reported gains in per capita consumption of cheese in 1955 over 1954, the net weighted change was negligible.

Switzerland, by increasing its consumption of cheese 0.4 pounds per person to 17.9 pounds, was able to retain the leading position ahead of Norway which, at 17.8 pounds per capita in 1955, also registered a gain of 0.4 pounds.

Sweden, by retaining a consumption of 16.8 pounds per capita in 1955, took over 3rd place from France, which dropped 0.2 pounds to 16.7 pounds per person. Despite the fact it reported the largest gain, 3.1 pounds per person over the 11.5 pounds reported for 1954, Denmark made no gain, remaining in 7th place behind the Netherlands which reported an 0.9 pounds increase to 15.8 pounds per person.

The United States reported an identical cheese consumption in both 1954 and 1955 of 7.8 pounds and remained as the 11th cheese-consuming nation. While Ireland showed the largest relative gain in cheese consumption, an increase of 40 percent to 2.4 pounds per person in 1955, it remained in last place with less than one-half the per capita rate of Austria, the next higher ranking country.

The numerical order of countries on the basis of the per capita consumption of cheese during 1954 and 1955 are shown in Table 4.

Table 4

Per Capita Consumption of Cheese in 17 Countries, 1954 and 1955

Rank	1954 Country	1954 Per capita consumption	1955 Country	1955 Per capita consumption
		Pounds		Pounds
1	Switzerland	17.5	Switzerland	17.9
2	Norway	17.4	Norway	17.8
3	France	16.9	Sweden	16.8
4	Sweden	16.8	France	16.7
5	Italy	15.6	Italy	16.0
6	Netherlands	14.9	Netherlands	15.8
7	Denmark	11.5	Denmark	14.6
8	Belgium	11.4	Belgium	11.3
9	United Kingdom	9.4	United Kingdom	9.4
10	German Republic	9.1	German Republic	9.3
11	United States	7.8	United States	7.8
12	Australia	6.5	Australia	5.2
13	Canada	6.4	Canada	6.6
14	Finland	6.2	Finland	6.6
15	New Zealand	5.7	New Zealand	6.1
16	Austria	4.3	Austria	5.0
17	Ireland	1.7	Ireland	2.4

In 1955, 6 countries reported increases in the consumption of condensed and evaporated milks, 4 showed declines and 3 no gains from 1954; complete data were not available from 4 countries. Of the reporting countries, the net weighted gain amounted to approximately 0.2 pounds per person.

Despite the fact that consumption of condensed and evaporated milks dropped 1.2 pounds to 21.2 pounds per person in 1955, the United States was able to maintain its rank as the premier consumer. Canada placed just behind the United States with 20.1 pounds per person in both 1954 and 1955. Canada's rate of consumption is more than double that of the Republic of Germany which showed a gain of 1.8 pounds per person to capture 3rd place from Australia.

The Netherlands, by showing a net gain in production of 77 million pounds while increasing exports by only 30 million pounds, had twice as much canned milks available for consumption in 1955 as in 1954. With the I.V.Z., the Dutch purchasing agency, showing no stocks as of January 1 of 1954, 1955 and 1956, the disappearance of canned milks amounted to 7.9 pounds per person compared to 3.6 pounds in 1954. This gain was sufficient to give the Netherlands 4th compared to its 7th position in 1954.

Australia fell from 3rd to 5th position with 7.1 pounds per person in 1955, a decline of 0.9 pounds, and Belgium, despite its increase from 4.9 pounds per person in 1954 to 5.3 pounds in 1955, dropped from 5th place to 7th. The United Kingdom, with a gain of 1.8 pounds, remained in 6th place with 6.0 pounds per person consumption of condensed milks during 1955.

Production information for Denmark for 1955 has not yet been available and Denmark's position of 10th ranked consumer of canned condensed milks in 1954 is temporarily taken by Sweden which reported a per capita consumption of 0.6 pounds in 1955; Italy and Austria also rise one notch as a result.

The rank orders of the countries in per capita consumption of condensed and evaporated milks in 1954 and 1955 are shown in Table 5.

Table 5

Per Capita Consumption of Condensed and Evaporated Milks in 17 Countries, 1954 and 1955

Rank	1954 Country	1954 Per capita consumption	1955 Country	1955 Per capita consumption
		Pounds		Pounds
1	United States	22.4	United States	21.2
2	Canada	20.1	Canada	20.1
3	Australia	8.0	Germany	9.3
4	Germany	7.5	Netherlands	7.9
5	Belgium	4.9	Australia	7.1
6	United Kingdom	4.2	United Kingdom	6.0
7	Netherlands	3.6	Belgium	5.3
8	France	2.3	France	1.8
9	Switzerland	1.4	Switzerland	1.8
10	Denmark	0.9	Sweden	0.6
11	Sweden	0.7	Italy	0.4
12	Italy	0.4	Austria	0.3
13	Austria	0.1	Finland	Negligible
14	Finland	Negligible	Denmark	n.a.
15	Ireland	n.a.	Ireland	n.a.
16	New Zealand	n.a.	New Zealand	n.a.
17	Norway	n.a.	Norway	n.a.

As was the case with the condensed milks, complete data on dried milks were lacking from 4 countries in 1955. Of those reporting, 6 showed gains, 5 reported losses and 2 had no change from 1954. On a weighted basis there was no change in per capita consumption in the 13 country total.

The United States retained its leadship as the premier consumer of dried milk products; per capita consumption in 1955 amounted to 6.1 pounds compared with 5.3 in 1954. The gain of 0.8 pounds per person was the largest registered and was made entirely through the increased use of nonfat dry milk.

Canada and Belgium also showed slight increases in consumption to 5.3 and 4.5 pounds per person respectively in 1955 to maintain 2nd and 3rd places. Australia, the United Kingdom, Sweden and Switzerland reported slight declines between 1954 and 1955,but each maintained its respective 1954 position behind Belgium. Production data for 1955 for Denmark, the 8th ranking country in 1954, were not available and, as a consequence, the Federal Republic of Germany, with a gain of 0.5 pounds to 1.9 pounds per person in 1955, moved into the vacated niche while the Netherlands, although showing no change from the 1.3 pounds per person consumed in 1954, took over Germany's previous position. Austria, by showing a gain of 0.4 pounds to a level of 0.7 pounds per person consumption of dried milks in 1955, jumped over both France and Italy to 10th place.

The rank orders of countries in the percapita consumption of dried milk products in 1954 and 1955 are shown in Table 6.

Table 6

Per Capita Consumption of Dried Milk in 17 Countries, 1954 and 1955

Rank	1954		1955	
		Per capita consumption	Country	Per capita consumption
		Pounds		Pounds
1	United States	5.3	United States	6.1
2	Canada	5.1	Canada	5.3
3	Belgium	4.1	Belgium	4.5
4	Australia	3.7	Australia	3.5
5	United Kingdom	3.3	United Kingdom	3.1
6	Sweden	3.2	Sweden	2.9
7	Switzerland	2.4	Switzerland	2.2
8	Denmark	1.4	German Republic	1.9
9	German Republic	1.4	Netherlands	1.3
10	Netherlands	1.3	Austria	0.7
11	France	0.8	France	0.5
12	Italy	0.4	Italy	0.4
13	Austria	0.3	Finland	0.2
14	Finland	0	Denmark	n.a.
15	Ireland	n.a.	Ireland	n.a.
16	New Zealand	n.a.	New Zealand	n.a.
17	Norway	n.a.	Norway	n.a.

As has been mentioned in this publication series previously, there can be no absolute comparisons of per capita consumption, whole milk equivalent basis, made between countries. These data are, on the contrary, subject only to relative comparisons since, with the exception of imports for consumption, the products are country products and the milk equivalents are in terms of the various countries' milks, which show considerable variations in composition. For example, in Ireland it took only slightly less than 1,100 pounds to make the 43.7 pounds of butter reported consumed per person in 1955. With per capita consumption of butter more than 1 pound higher than Ireland's figure, New Zealand used just a little more than 800 pounds of milk to supply the butter for per capita consumption. Furthermore, the fat contents of manufactured products also vary between countries; butterfat in butter was reported as high as 83.5 percent while some countries, Italy, for example, produce, consume and export to other countries in the study group considerable amounts of low-fat cheese.

In order to take the various differences into consideration, the whole milk equivalent consumption data were adjusted to a somewhat uniform basis. The United States was taken as a base and estimates made of the whole milk equivalent per capita consumption in other countries on this base. These adjusted estimates are compared with the country estimates of per capita whole milk equivalent consumption for 1955 in Table 7.

Table 7

Rank Orders and Estimates of Whole Milk Equivalents Per Capita Consumption of Milk and Dairy Products in Specified Countries on a Country Product Basis and an Adjusted Basis, 1955

Country	Country product basis		Adjusted basis	
	Per capita consumption - lbs.	Rank	Per capita consumption - lbs.	Rank
Ireland	1,489	1	1,325	3
Finland	1,457	2	1,543	2
New Zealand	1,353	3	1,591	1
Sweden	1,131	4	1,102	4
Australia	1,032	5	1,069	5
Canada	1,027	6	937	6
Belgium	983	7	853	10
Switzerland	967	8	924	8
Norway	934	9	931	7
Denmark	854	10	907	9
United Kingdom	753	11	714	11
France	736	12	658	14
German Republic	710	13	690	13
Austria	710	14	648	15
United States	700	15	700	12
Netherlands	658	16	615	16
Italy	319	17	304	17

On the basis of the above estimates, New Zealand would take over the number 1 position from Ireland which would fall to 3rd position. Belgium, presently listed 7th would, on the basis of the adjusted estimate, fall to 10th place while Norway would rate the vacated 7th position and Denmark would gain one position to 9th. On the adjusted basis estimate, the United States, which, of course, shows no change, would take the place of France, vacating the 15th position to take over the 12th place.

MILK AND DAIRY PRODUCTS: Estimates of per capita production and consumption 1/ in specified countries, prewar average, annual 1954 and 1955

Country	Prewar 2/	1954	1955 3/
Austria 4/	Pounds	Pounds	Pounds
Milk production per capita	892	847	845
Milk consumption per capita 5/	708	687	710
Per capita product consumption			
Fluid milk and cream	467	419	405
Butter	6.6	9.3	10.5
Cheese	9.4	4.3	5.0
Canned milk	6/	0.1	0.3
Dried milk	6/	0.3	0.7
Belgium			
Milk production per capita	808	926	934
Milk consumption per capita 5/	777	996	983
Per capita product consumption			
Fluid milk and cream	173	208	210
Butter	20.6	24.5	24.1
Cheese	8.2	11.4	11.3
Canned milk	1.1	4.9	5.3
Dried milk	1.7	4.1	4.5
Denmark			
Milk production per capita	3,158	2,699	2,550
Milk consumption per capita 5/	885	835	854
Per capita product consumption			
Fluid milk and cream	369	353	368
Butter	19.5	19.1	18.7
Cheese	12.2	11.5	14.6
Canned milk	0.8	0.9	7/
Dried milk	0.3	1.4	7/
Finland			
Milk production per capita	1,552	1,533	1,505
Milk consumption per capita 5/	1,132	1,392	1,457
Per capita product consumption			
Fluid milk and cream	608	629	653
Butter	23.9	34.0	35.8
Cheese	2.8	6.2	6.6
Canned milk	7/	8/	8/
Dried milk	7/	8/	0.2
France 9/10/			
Milk production per capita	822	1,000	934
Milk consumption per capita 5/	631	747	736
Per capita product consumption			
Fluid milk and cream	190	195	193
Butter	12.7	15.0	14.8
Cheese	14.3	16.9	16.7
Canned milk	0.5	2.3	1.8
Dried milk	0.2	0.8	0.5

See footnotes at end of table.

MILK AND DAIRY PRODUCTS: Estimates of per capita production and consumption 1/ in specified countries, prewar average, annual 1954 and 1955--Continued

Country	Prewar 2/	1954	1955 3/
	Pounds	Pounds	Pounds
Republic of Germany 4/ 11/			
Milk production per capita	896	748	733
Milk consumption per capita 5/	12/ 13/ 805	710	710
Per capita product consumption			
Fluid milk and cream	12/ 13/ 307	267	263
Butter	12/ 13/ 18.0	15.3	15.2
Cheese	12/ 13/ 7.7	9.1	9.3
Canned milk	12/ 13/ 2.5	7.5	9.3
Dried milk	12/ 13/ 0.2	1.4	1.9
Ireland			
Milk production per capita	1,755	1,875	1,806
Milk consumption per capita 5/	1,152	1,423	1,489
Per capita product consumption			
Fluid milk and cream	324	368	371
Butter	33.4	41.6	43.7
Cheese	0.7	1.7	2.4
Canned milk	1.0	6/	6/
Dried milk	0.3	6/	6/
Italy 9/			
Milk production per capita	332	388	405
Milk consumption per capita 5/	14/ 15/ 225	309	319
Per capita product consumption			
Fluid milk and cream	80	114	115
Butter	2.6	2.9	3.2
Cheese	11.3	15.6	16.0
Canned milk	7/	0.4	0.4
Dried milk	7/	0.4	0.4
Netherlands			
Milk production per capita	1,315	1,219	1,192
Milk consumption per capita 5/	809	641	658
Per capita product consumption			
Fluid milk and cream	272	339	329
Butter	15.2	6.1	6.5
Cheese	16.0	14.9	15.8
Canned milk	1.1	3.6	7.9
Dried milk	2.2	1.3	1.3
Norway 4/			
Milk production per capita	1,190	1,089	1,081
Milk consumption per capita 5/	924	923	934
Per capita product consumption			
Fluid milk and cream	387	522	522
Butter	15.2	9.0	9.3
Cheese	16.9	17.4	17.8
Canned milk	7/	6/	6/
Dried milk	7/	6/	6/

See footnotes at end of table

MILK AND DAIRY PRODUCTS: Estimates of per capita production and consumption 1/ in specified countries, prewar average, annual 1954 and 1955--Continued

Country	Prewar 2/	1954	1955 3/
	Pounds	Pounds	Pounds
Sweden			
Milk production per capita	1,625	1,336	1,263
Milk consumption per capita 5/	1,256	1,150	1,131
Per capita product consumption			
Fluid milk and cream	521	495	487
Butter	22.1	24.5	24.0
Cheese	14.1	16.8	16.8
Canned milk	2.4	0.7	0.6
Dried milk	0.4	3.2	2.9
Switzerland 4/			
Milk production per capita	1,438	1,268	1,264
Milk consumption per capita 5/	1,025	976	967
Per capita product consumption			
Fluid milk and cream	511	470	458
Butter	14.3	14.0	13.9
Cheese	17.6	17.5	17.9
Canned milk	0.2	1.4	1.8
Dried milk	1.0	2.4	2.2
United Kingdom			
Milk production per capita	339	476	468
Milk consumption per capita 5/	970	736	753
Per capita product consumption			
Fluid milk and cream	234	342	344
Butter	24.8	14.0	14.7
Cheese	8.8	9.4	9.4
Canned milk	11.4	4.2	6.0
Dried milk	1.4	3.3	3.1
Australia			
Milk production per capita	13/ 1,747	1,465	1,527
Milk consumption per capita 5/	13/ 976	1,083	1,032
Per capita product consumption			
Fluid milk and cream	13/ 234	277	279
Cheese	13/ 3.9	6.5	5.2
Canned milk	13/ 3.9	16/ 8.0	16/ 7.1
Dried milk	13/ 2.0	3.7	3.5
New Zealand 13/			
Milk production per capita	6,360	5,210	5,253
Milk consumption per capita 5/	1,307	1,344	1,353
Per capita product consumption			
Fluid milk and cream 16/	437	476	466
Butter 16/	40.6	44.9	44.9
Cheese	5.0	5.7	6.1
Canned milk 16/	3.1	12/ 17/ 8.6	12/ 17/ 8.0
Dried milk 16/	0.6	17/	17/

See footnotes at end of table

MILK AND DAIRY PRODUCTS: Estimates of per capita production and consumption 1/ in specified countries, prewar average, annual 1954 and 1955--Continued

Country	Prewar 2/	1954	1955 3/
	Pounds	Pounds	Pounds
Canada			
Milk production per capita	1,377	1,112	1,107
Milk consumption per capita 5/	1,223	1,019	1,027
Per capita product consumption			
Fluid milk and cream	426	427	436
Butter	31.0	20.7	20.6
Cheese	3.8	6.4	6.6
Canned milk	7.1	20.1	20.1
Dried milk	1.8	5.1	5.3
United States			
Milk production per capita	803	753	748
Milk consumption per capita 5/	791	690	700
Per capita product consumption			
Fluid milk and cream	355	395	400
Butter	16.9	8.7	8.9
Cheese	5.3	7.8	7.8
Canned milk	18.5	22.4	21.2
Dried milk	1.9	5.3	6.1

1/ Unless otherwise stated, whole milk equivalent consumption of ice cream included with fluid milk.
2/ Prewar averages are for the years 1933-34 to 1937-38 for Denmark, Sweden, and Switzerland; 1935-38 for the Republic of Germany; 1935-39 for Norway, Canada, and the United States; and 1934-38 for all others.
3/ Preliminary.
4/ Includes the milk of cows and goats.
5/ Fluid milk and dairy products in terms of whole milk equivalent.
6/ Product consumption, not available; estimate of whole milk equivalent included in milk consumption per capita.
7/ Not available.
8/ Negligible.
9/ Includes the milk of cows, sheep, and goats.
10/ Estimates include the Saar in 1954 and 1955.
11/ Prewar estimates exclude the western sectors of Berlin.
12/ Estimated.
13/ Years ending June 30.
14/ Does not include canned whole milk.
15/ Does not include dried whole milk.
16/ Includes product used for ice cream.
17/ Dried milk included with canned milk on individual product weight basis.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of agricultural attaches and other U. S. representatives abroad, and other information.

943
17

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D.C.

LIBRARY
CURRENT SERIAL RECORD
APR 26 1957
U. S. DEPARTMENT OF AGRICULTURE

FD 13-56 November 19, 1956

World Output of Dairy Products, Second Quarter, 1956

Factory production of butter, canned milk and dried milk increased, cheese production decreased in the principal producing countries in the second quarter of 1956 when compared with the same quarter of 1955.

In several countries of Western Europe, milk production for the quarter was below the earlier year, due to several factors. Pastures in Denmark and Sweden were in thin condition; in France grass was very poor, due to the cold, late spring. Pastures in Canada got off to a slow start.

Several countries reported milk production above the 1955 level. United Kingdom production was at a record level. In the Republic of Germany, milk production for the quarter set a new record with somewhat lower cow numbers. Pastures in Norway were in prime condition and milk production was up. In most areas of Australia, pasture growth was excellent and dairy production was at a high level. Conditions for production also were favorable in New Zealand in this quarter. In the United States, yield per cow continued high and milk production in the second quarter exceeded that of comparable 1955.

Butter production in factories increased 2 percent during the April-June period of 1956 compared with the same three months of 1955. In Danmark output showed an increase, attributed in part to the satisfactory prices obtained for butter and in part to the diversion of larger supplies for butter manufacture. A new all-time record for the quarter was set in the Republic of Germany, where production was encouraged by a very good market and high prices. Deliveries of milk to plants in Ireland were considerably higher in this quarter, with most of them going to creameries. Much of the increased milk production in the United Kingdom was utilized in manufacturing and butter output rose sharply. Other Western European countries reporting larger butter production in the second quarter were Finland, the Netherlands and Norway. Output in France and Sweden was down, reflecting the decreased milk production during the quarter.

With milk production in the quarter up, Australian butter output showed a gain over the earlier year. With greatly expanded milk production in New Zealand, larger quantities became available for butter production. In both Canada and the United States output of butter declined.

FACTORY DAIRY PRODUCTS: Output in principal producing and exporting countries, 2nd Quarter (calendar) 1956, with comparisons

Country and Product	Average 1934-38	Average 1946-50	Total 1955	1955 2nd Quarter	1955 3rd Quarter	1955 4th Quarter	1956 1st Quarter	1956 2nd Quarter	Second Quarter 1956/1955
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	Percent
BUTTER									
Canada	1/ 254,774	277,868	319,687	106,745	117,103	61,527	36,842	100,517	94
United States	1,705,240	1,301,830	1,382,400	440,990	318,945	289,665	352,290	430,030	98
Belgium	46,179	55,353	99,355	—	—	—	—	—	—
Denmark	400,660	318,697	364,200	109,128	97,884	78,925	83,113	112,655	103
Finland	61,287	2/ 61,215	107,421	3/ 31,001	3/ 31,466	3/ 23,574	3/ 28,966	42,791	138
France 4/	220,000	—	483,000	150,000	130,000	106,000	92,000	139,000	93
Republic of Germany	5/6/ 560,000	492,188	3/ 639,854	187,611	3/ 175,870	141,405	144,882	197,868	105
Ireland	89,400	68,648	3/ 84,112	3/ 27,421	35,887	16,827	5,331	32,111	117
Netherlands	201,000	155,620	161,992	56,557	47,529	32,155	3/ 28,565	59,524	105
Norway	24,930	20,049	23,162	9,751	6,047	2,724	4,511	11,376	117
Sweden	152,769	216,442	185,595	56,252	55,207	36,331	3/ 37,025	55,816	99
Switzerland 7/	57,760	36,949	8/ 57,540	17,461	16,197	10,961	—	--	—
United Kingdom	44,200	23,529	3/ 33,600	3/ 17,920	3/ 7,168	3,360	3/ 7,840	23,744	132
Argentina	65,742	100,657	3/ 124,281	3/ 29,226	22,282	33,273	46,861	31,211	107
Union of South Africa	9/ 27,725	44,845	78,269	17,340	14,653	20,844	25,539	—	—
Australia	6/ 415,250	354,371	443,901	65,966	89,515	169,736	134,078	67,754	103
New Zealand	6/ 366,912	346,095	3/ 427,419	3/ 34,817	3/ 82,380	3/ 186,520	3/ 137,723	41,328	119
CHEESE									
Canada 10/	1/ 119,924	114,329	79,238	27,361	30,925	14,622	6,947	25,348	93
United States	643,234	1,156,005	1,353,415	447,045	342,810	269,360	311,200	442,125	99
Denmark	68,820	123,634	193,344	63,272	56,659	35,494	33,069	60,846	96
France	11/	11/	494,000	159,000	148,000	99,000	91,000	157,000	99
Italy 12/	523,513	491,326	767,642	—	—	—	--	—	—
Netherlands	4/ 200,000	176,926	347,738	119,562	102,838	73,538	56,482	95,679	80
Norway 13/	39,067	35,564	63,552	22,706	17,255	10,430	15,126	25,256	111
Sweden	76,059	115,005	3/ 119,276	3/ 41,655	35,225	21,364	3/ 22,719	35,242	85
Switzerland 13/	111,729	107,232	8/ 132,717	37,430	42,802	24,148	—	—	—
United Kingdom 7/	109,000	69,888	3/ 141,344	60,480	3/ 29,792	22,400	42,560	76,384	126
Argentina	67,873	203,830	275,575	3/ 66,702	59,447	3/ 75,226	80,672	60,534	91
Union of South Africa	9/ 10,195	17,967	26,553	5,645	5,779	7,397	7,689	—	—
Australia	6/ 48,400	98,396	87,867	11,335	21,773	34,012	18,964	11,649	103
New Zealand	6/ 210,911	216,842	3/ 212,697	3/ 18,323	3/ 33,197	3/ 94,143	3/ 66,348	22,109	121

CANNED MILK										
Canada 14/	1/	104,335	266,532	320,504	105,421	104,715	59,769	57,269	107,034	102
United States 15/		1,970,189	3,170,576	3/ 2,618,200	3/ 891,965	3/ 678,350	471,325	556,445	862,960	97
Cuba	16/	32,564	36,655	64,705	—	—	--	—	—	—
Denmark		40,785	58,701	--	—	—	—	—	—	—
France	17/	28,953	16/ 57,984	4/ 110,000	—	—	—	—	—	—
Republic of Germany		11/	11/	485,472	172,546	141,595	94,578	105,523	193,599	112
Netherlands		309,952	181,222	576,798	167,697	162,020	134,682	3/ 119,304	193,563	115
Switzerland		14,198	13,031	—	—	—	—	—	—	—
United Kingdom		378,560	219,914	3/ 397,376	3/ 167,104	3/ 85,120	3/ 67,872	86,240	179,648	108
Argentina	18/	3,159	16/ 11,914	25,573	4,991	5,616	8,015	6,632	5,199	104
Australia	6/	41,894	132,745	3/ 121,366	3/ 12,230	26,237	3/ 54,787	35,025	17,808	146
New Zealand	16/	11,273	—	—	—	--	—	—	—	—
DRIED MILK 19/										
Canada	1/	26,079	70,876	3/ 106,308	3/ 36,416	33,964	22,797	13,982	34,930	96
United States	16/	203,555	913,436	1,587,820	561,975	339,570	315,375	429,500	557,890	99
Belgium		5,500	6,607	34,804	—	—	--	—	—	—
Denmark		2,205	16,866	—	—	—	—	—	--	—
France	17/	7,685	16/ 3,308	4/ 22,000	—	—	--	—	—	--
Republic of Germany		11/	11/	83,224	30,145	26,089	17,095	17,734	38,463	128
Netherlands		56,438	54,468	117,757	61,473	37,912	8,054	13,967	69,886	114
Sweden		1,351	24,566	23,227	8,889	6,758	3,462	6,523	11,861	133
Switzerland		7,187	10,847	—	—	—	—	—	—	—
United Kingdom		43,098	73,848	3/ 99,904	46,592	18,816	3/ 17,696	27,552	57,568	124
Argentina	18/	3,977	16/ 14,070	22,707	5,015	3,455	7,068	8,329	4,588	91
Australia	6/	16,971	54,235	3/ 96,536	3/ 8,152	20,794	44,908	28,416	12,826	157
New Zealand	20/	17,429	—	—	—	—	--	—	—	—

1/ Average 1935-39. 2/ Average 1948-50. 3/ Revised. 4/ Estimated. 5/ Average 1935-38. 6/ Production year ending June 30. 7/ Total production. 8/ Annual production figures more complete than monthly figures used in quarterly data. 9/ Production year ending August 31. 10/ Cheddar cheese only. 11/ Not available. 12/ Total cheese, and includes cheese made from the milk of sheep and goats. 13/ Total cheese, and includes cheese made from the milk of goats. 14/ Both bulk and case goods. 15/ Evaporated whole and condensed whole case goods only. (Estimates of bulk types discontinued). 16/ Less than a 5-year average. 17/ For 1937. 18/ For 1939. 19/ Total dried whole milk and dried skim milk for human consumption. 20/ For 1938.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches and other U. S. representatives abroad, and other information. November 5, 1956.

Factory production of cheese in the second quarter dropped 2 percent below comparable 1955. In Denmark lower prices and the accumulation of rather large inventories served as restraints on cheese production. Shorter milk supplies in Sweden also resulted in greatly decreased output of cheese in this quarter. Cheese production in the Netherlands also showed a sharp decline. With the heavier supplies of manufacturing milk United Kingdom cheese production was up. Norway was the only other country of Western Europe reporting increased cheese production in this quarter.

Gains in cheese output in both Australia and New Zealand were also attributed largely to the higher milk production of this quarter. Cheese production was down in Canada, due primarily to a drop in milk deliveries to cheese factories. Output in the United States was slightly below the 1955 level.

Over-all canned milk production was up 2 percent in the second quarter of 1956. Consumer demand for storable milk in the Republic of Germany was reflected in increased production of both evaporated and condensed milk. Output was up in the Netherlands, the United Kingdom, Australia and Canada, but down in the United States.

Dried milk production in the second quarter of 1956 rose 4 percent over the same quarter of 1955. Increased consumer demand again accounted for heavier output of both dried whole milk and nonfat dry milk in the Republic of Germany. Other countries in which the quantity of total dried milk manufactured was in excess of last year were the Netherlands, Sweden, the United Kingdom and Australia. Canada's output of both types declined, while in the United States decreased production of nonfat dry milk accounted for the slight drop in over-all dried milk output in this quarter.

Current Conditions Abroad

Denmark: - During the remainder of 1956, it seems likely that milk production will not fall below the 1955 level. Pastures have improved and feed supplies are ample.

France: - Pastures during the middle and late summer were good and it is expected that milk production in the third quarter will not be below comparable 1955.

Republic of Germany: - Despite unfavorable weather, cattle feed supplies for the fall and winter months will be more plentiful than anticipated.

Ireland: - The unusually wet summer and autumn promoted pasture growth. Milk production during the balance of the year is expected to continue at a level somewhat above 1955.

United Kingdom: - The wettest July in 100 years caused crop damage and flooding. Concern is now expressed over expensive feed later.

Australia: - Feed conditions are above normal and production per cow is increasing. Pastures are going into the flush spring season in excellent condition. All factors point to continued production at record levels.

New Zealand: - Recent heavy rainfalls have water-logged pastures. Stock have lost condition.

A summary of this information was published in the November 5, 1956 issue of Foreign Crops and Markets.

43
17
2

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D.C.

LIBRARY
CURRENT SERIAL RECORD
APR 26 1957
U. S. DEPARTMENT OF AGRICULTURE

FD-12-56 October 26, 1956

WORLD MILK PRODUCTION ESTIMATES, 1956

World milk production in 1956, on the basis of reports from 22 primary dairy countries, which produce more than 60 percent of the world's supply, will be higher by 2 percent than 1955 output. The 22 countries are expected to show a total production of 381 billion pounds of cow's milk in 1956 compared to 372 billion pounds reported by these countries in 1955.

The gain in milk production is fairly general. Particularly important is the increased output expected in Europe. In 1955 adverse weather conditions throughout most of Europe were responsible for a drop of about 2 percent in milk output. This year, only France, Sweden, and Denmark are expected to report declining milk production from the previous year. In Denmark milk supplies have run about 5 percent less than 1955; however, farmers were reported to have stepped up feeding of concentrates to offset the lack of pasture. Pasture conditions have improved during the past few weeks and, by year end, annual production will not be greatly under the 1955 level.

Both Finland and the United Kingdom are expected to show considerable increases in milk production during 1956. Finland, which was a net importer of butter in 1955, now is a net exporter and will show increased dairy exports in 1956. In the United Kingdom milk production has been increasing at a much higher rate than it can be absorbed by the domestic fluid market, and the surplus is going into butter and cheese manufacture. This year's production is due to a record flush output, which did not drop off as much seasonally as expected.

In the Western Hemisphere, all reporting countries show an increase in expected annual production. The largest percentage gain, 10 percent, is expected in Mexico. The United States will show the largest absolute increase, approximately 3.5 billion pounds over 1955.

Continued record productions are being recorded in New Zealand and Australia. Feed conditions have been above average, and production per cow is increasing. The increase in milk output in the area will approach 8 percent over 1955 which, in turn, was 5 percent over 1954.

This is one of a series of regularly scheduled reports on world agricultural production approved by the Foreign Agricultural Service Committee on Foreign Crops and Livestock Statistics. It is based in part upon reports of Agricultural Attaches and other U. S. representatives abroad.

Cows' milk: Estimate of 1956 production in important producing countries, with comparisons

Country	Average 1934-38	Average 1946-50	Annual 1954	Annual 1955	Annual 1956 1/
	Million pounds	Million pounds	Million pounds	Million pounds	Million pounds
Canada	2/ 15,284	16,844	16,902	17,277	17,600
Mexico	3/ 3,000	3,086	3,882	4,177	4,600
United States	104,930	117,297	122,094	123,554	127,000
Cuba	2/ 1,010	1,122	1,653	1,675	1,690
Austria	4/ 5,602	3,726	5,597	5,584	5,800
Belgium	6,790	6,219	8,165	8,283	8,450
Denmark	5/6/11,684	10,181	11,892	11,321	11,300
Finland	5,587	4,149	6,425	6,381	7,000
France	33,000	27,256	42,903	40,406	39,400
Germany, Republic of	6/7/33,069	8/ 24,993	37,595	37,273	38,100
Greece	5/ 251	9/ 269	587	701	725
Ireland	5,090	4,800	5,500	5,253	5,300
Italy	10/11,500	11/15,000	16,949	17,949	18,000
Luxembourg	318	8/ 346	401	395	400
Netherlands	11,180	10,109	12,967	12,832	13,000
Norway	5/6/ 2,954	3,116	3,644	3,655	3,725
Sweden	5/6/10,238	10,245	9,634	9,173	8,880
Switzerland	5,680	4,951	6,153	6,202	6,400
United Kingdom	18,424	20,394	24,196	23,834	25,800
Argentina.12/	13/ 6,826	8/ 7,762	10,580	11,183	11,200
Australia 14/	4/ 11,780	12,206	13,174	14,017	15,105
New Zealand	6/ 10,176	9,487	10,905	11,220	11,780

1/ Preliminary. 2/ Average 1935-39. 3/ For 1940. 4/ For 1934. 5/ Average 1933-37. 6/ Year ending June 30. 7/ Average 1935-38. 8/ Average 1948-50. 9/ Average 1947-50. 10/ Includes an estimate of milk fed to livestock. 11/ For 1950. 12/ Milk for commercial use only; does not include milk consumed on farms nor milk fed. 13/ For 1938. 14/ Excludes milk fed to livestock.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches and other U. S. representatives abroad and other information.

This is one of a series of regularly scheduled reports on world agricultural production approved by the Foreign Agricultural Service Committee on Foreign Crops and Livestock Statistics.

Reserve
.943
F117

LIBRARY
CURRENT SERIAL RECORD
OCT 25 1956

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
U.S. FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D.C.

FD 11-56 September 21, 1956

DAIRY PRODUCTS AT THE INTERNATIONAL TRADE FAIRS

By L. H. Burgwald
Marketing Specialist 1/

The dairy products displays at International Trade Fairs such as those at Barcelona, Spain and Rome, Italy have built good will, and shown the dairy industries and Governments of foreign countries that people of diverse nationalities do like recombined milk, and soft-served ice cream made from nonfat dry milk and anhydrous milk fat.

The displays also have shown, by serving as a distribution center for United States cheddar cheese samples given away to Fair visitors, that such samples eventually may lead to greater European demand for such cheese.

Ice cream, of course, has been made by the local dairy industry in the countries where there have been Fair demonstrations, even though in many cases the "ice cream" resembled our milk sherbets. In some areas, in both Spain and Italy, good quality ice cream was being made that compared very favorably with the United States product.

In Spain, no milk pasteurization plants were found. Milk was sold either raw or was sterilized. Lack of refrigeration in the homes accounted for use of sterilized milk. The raw milk was invariably boiled as soon as received in the home.

In Spain, samples of recombined milk, soft-serve ice cream and cheddar cheese were distributed. The people, both children and adults, liked our recombined milk, and in no instance did anyone refuse the sample, nor discard it after tasting it, and the ice cream was popular, of course. The cheese samples were usually taken home. Those eaten at the exhibit seemed to be relished.

These facts should pave the way for recombined milk operations for supplementing the fresh milk supply in Spain and for making ice cream from recombined products. The response to our products by the public should indicate to both the local Government officials and the dairy industry that there would be a market for more good quality products.

1/ The author, who bases this report on first-hand observations at the Barcelona and Rome Fairs, wishes to acknowledge the valuable assistance and information supplied by the Agricultural Attaches and their staffs, and other United States Government representatives abroad, and members of the dairy industry.

Consumption of milk and dairy products cannot be increased in Spain unless an adequate supply of good dairy products is available to meet the demand.

BARCELONA

The Barcelona Fair dates were June 2 to June 20. During this period an average of about 2,000 4-ounce cups of milk, 3,000 ice cream cones and 3,000 samples of cheddar cheese were given out daily.

These amounts varied for milk from about 1,600 to 2,200; for ice cream from 2,000 to 5,500; and for cheese from 1,700 to 6,000 per day. The crowds frequently started to line up two hours before the doors were opened to the exhibit. Total amounts distributed were about 40,000 cups of recombined milk, 60,000 ice cream cones and 60,000 samples of cheese. A total of 250,000 pieces of literature printed in Spanish about dairy foods were passed out.

The American dairy team visited several dairy plants (3 sterilized milk, and 1 ice cream) in Barcelona before the opening of the Fair and at that time invited the people from these dairy plants to a preview of the United States recombining exhibit, the day before the fair opened. These plants were all relatively small. None handled more than 12,000 liters per day, for a city of about 1,369,000 population.

A Dairy Day luncheon also was held at the exhibit for the members of the dairy industry, the dairy importers and the United States Consulate Staff. In addition to recombined milk, ice cream and cheese, yoghurt and eggnogg made from our recombined products were also served.

The visitors were taken through the exhibit in small groups and the operation of the equipment was explained. A total of about 90 people attended. That the dairy industry there approved of the exhibit and procedure can be gathered from a letter from one of the officials of one of the large sterilized milk plants in the city. He states "You can be sure that you have left good friends in Spain".

ROME

In Italy, it had been planned to make recombined milk, ice cream,cottage cheese and yoghurt from these products for the American Day Luncheon held in connection with the Super Market Fair, but the nonfat dry milk and anhydrous milk fat designed for this purpose was not available.

For this luncheon yoghurt was made from U. S. low heat, spray dried non-fat milk supplied by Herbert Ferguson, the Assistant Agricultural Attache. Samples of United States cheddar cheese were brought from the Barcelona supply for use at the luncheon. These products were well received.

The market development program in Italy brought results in one respect. The U.S. Naval base at Naples became interested in the use of recombined milk and ice cream made from United States products.

The Naval Base was greatly interested in such recombined dairy products. At present it is getting its milk supply from Milano about 500 miles away but the hauling charges are more than the milk costs. Total cost to the Navy is about 27.5 cents per liter. The cost for recombined milk should be less than half.

The Navy officials estimate that they are using at present about 31,000 gallons of milk per month, but this could probably be increased if the Fleet could be assured of a supply of milk being available whenever they needed it. Now several days' notice in advance must be given for extra milk and even then the extra supply cannot always be assured.

Although the Navy would prefer a U. S. company to put in a plant, they would permit an approved Italian plant to do the processing.

The Cirio Foods Plant milk operation located about 20 miles from Naples was visited in this connection. A plant official expressed interest in processing and delivering the milk. Ice cream that the Navy would also want would not be available from this company.

Information was received that Motta Company, one of the largest food processing establishments in Italy, with headquarters in Milano, was building an ice cream plant in Naples. The Milano headquarters was visited with reference to recombining for the Navy. The company has a very large, modern and sanitary plant and makes ice cream, candies and baked goods.

The company officials contacted were very greatly interested in the proposition of putting in a milk processing department in their Naples plant to process recombined milk. They are already equipped to process the ice cream. Officials stated they would provide processing and delivery costs to the Navy in the near future. It has been learned that this company has quoted very reasonable prices. Using U. S. nonfat dry milk and anhydrous milk fat, the Navy would be provided an excellent quality, safe milk and ice cream supply at a very reasonable cost.

The Motta Company in Milano was also interested in milk fat for use in baking a type of cake that is very popular at the holiday season. They use about 15 tons of milk fat a day for a period of about 50 days for a total of about 750 tons. Much of the butter used by them for making the milk fat for these cakes is imported. They estimated their cost for this fat to be about 62 cents a pound. The United States should be able to compete for this trade at that price. As there are other large baking concerns in Italy there is a good possibility of additional sales for this product.

43
17
.2

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D.C.

LIBRARY
OCT 1 1956
U. S. DEPARTMENT OF AGRICULTURE

FD 10-56 August 30, 1956

MARKETING DAIRY PRODUCTS AS ICE CREAM, MILK AND CHEESE FROM RECOMBINED MILK, IN SOME CENTRAL AMERICAN COUNTRIES

By L. H. Burgwald, Marketing Specialist 1/
Foreign Marketing Branch
Dairy and Poultry Division

Introduction

The possibility of marketing nonfat dry milk, anhydrous milk fat and cheddar cheese was the subject of a recent Foreign Agricultural Service study in some of the Central American countries.

In Panama the making of recombined ice cream from United States low-heat, spray-process, nonfat dry milk and anhydrous milk fat was demonstrated with very favorable results.

In Costa Rica the blending of United States cheddar cheese with locally manufactured queso blanco for making pasteurized processed cheese was demonstrated. Such a blending could result in a market for United States cheddar cheese.

In El Salvador the advantages and possibilities of using U. S. nonfat dry milk and anhydrous milk fat for making recombined milk to supplement the fresh supply during times of shortage was presented to the dairy industry and Government officials.

In Nicaragua the use of recombined milk for making queso blanco was demonstrated. The possibilities of processing queso blanco and blending it with United States cheddar cheese was discussed.

Panama

There is an adequate supply of milk in Panama during the rainy season for all fluid requirements.

There has been a recent merger of three dairy plants, the Suavel, the Ganadera Industrial and the Tagaropulos Inc. All of the milk eventually will be handled in the Suavel plant in Panama City, and all of the ice cream in the

1/ The author wishes to acknowledge the valuable assistance and information supplied by the Agricultural Attache and his staff, and other United States Government representatives abroad; U.N. and local Government officials, and members of the dairy industry in the countries visited.

Tararopulos plant in Colon. The ice cream business from the Suavel plant has already been transferred to the Tagaropulos plant, but the Tagaropulos plant was still bottling milk.

The Suavel plant was bottling about 6,000 gallons of milk daily, and had a surplus of 600 to 900 gallons daily that was being sold to an evaporated milk plant at 11 cents per liter.

The farmers were paid 15 cents per bottle (1/5 gallon) or about 18½ cents per quart for milk going into the bottles. This milk retails at 30 cents per quart, (26 cents at the commissary).

All of the milk coming into the Suavel plant is from large herds, tank-cooled and tank-hauled. Seven farms, milking from 64 to 200 cows and producing from 520 quarts to 1,440 quarts each, (average from 6 to 8 quarts per cow per day) were visited. Better cows, and lower cost of production to obtain lower consumer prices will be necessary before a great increase in consumption of milk can be expected.

With enough fresh milk available for bottling purposes, the Government will not permit recombined milk to be sold in Panama, but it does permit recombining for making ice cream.

The Tagaropulos plant was manufacturing ice cream for the U. S. Army in Panama from a foreign brand, high-heat, spray-type, nonfat dry milk and butter. After a demonstration, the Army and the dairy industry agreed that a better quality ice cream could be made using a United States low heat, nonfat dry milk and anhydrous milk fat. The plant management was so impressed with the product and the Army's acceptance of it that it immediately requestedquotations for United States anhydrous milk fat. A car load of low-heat, spray-type nonfat milk from the United States for use in ice cream had recently been received.

United States dairy products apparently will be used for making ice cream in Panama.

While in Panama it was learned that a whole milk powder plant in Concepcion supplemented its fluid milk supply with nonfat dry milk and butter for making whole milk powder. The plant was receiving about 5,400 liters of milk per day, which is about 1,000 liters more than had been expected at this time. The plant has been in operation about a year. This indicates that the dairy industry in Panama is definitely expanding.

Costa Rica

The dairy industry is making excellent progress in Costa Rica. In San Jose the milk cooperative,started 4 years ago, has already outgrown its plant and is planning a new one. It is receiving 56,000 bottles (2/3 liter) or about 84,000 pounds of milk daily, and bottles 37,000 bottles of pasteurized milk per day.

The remainder of the milk received is used for ice cream, butter and nonfat dry milk. A powder plant provided by UNICEF uses 18,000 pounds of skim milk per day for drying.

The farmer receives an average of 59 centavos (9 cents) per bottle (2/3 liter). Surplus milk (base established during dry season) is purchased for 10 centavos less per bottle. The milk retails at 80 centavos per bottle (12 cents). These figures are equivalent to about 13½ cents per quart to the producer and about 18 cents per quart to the consumer.

While in San Jose, Mr. Alfredo Hernandez, Director of the Costa Rica National Production Council (Government) requested information as to how 40 tons of butter oil in drums could be converted into butter for use in the school lunch program in Costa Rica. This butter oil was received by the Costa Rican Government for flood relief but arrived too late to be used for that purpose.

With a Waring blender, pound samples of butter containing 80 percent fat, 2 percent salt, 17.5 percent water and 0.5 percent curd and ash were made using 363 grams of butter oil, 9 grams of salt dissolved in 70 mls. of water, and 12 mls. of a good lactic starter. It was placed in paper cups and chilled. The butter thus made had a very good flavor and was very satisfactory. A batch ice cream freezer, without refrigeration, could probably be used for making the butter on a commercial scale.

At the Jorge Leiva Processed Cheese Plant, in Cartago, several batches of processed cheese from locally manufactured queso blanco cheese and blends of queso blanco cheese with varying amounts of United States cheddar cheese were made.

Very good processed cheese was made from both Bargaces (a hard smoked cheese) and from Tierna (a soft fresh cheese). The smoked surface was removed from the Bargaces cheese before processing. The addition of 25 and 50 percent of aged cheddar cheese improved the flavor.

The Jorge Leiva Processed cheese is processed from queso blanco cheese made on Jorge Leiva farm, and is sold under the brand name of "Baviera" Pasteurized Processed Cheese. Only 300 pounds of processed cheese were being produced per week in this plant. It sells wholesale at 4 colones (60 cents) a pound and retails at 5 colones (75 cents) a pound. Bargaces cheese costs 2 colones (30 cents) a pound, and Tierna cheese 2.25 colones (34 cents) a pound.

Locally manufactured processed cheese, blended with quantities of United States cheddar cheese, was reported by Costa Ricans who sampled it, to be better in flavor. Such a blend would have to sell for more than the straight processed queso blanco unless the import duty on cheese were waived or reduced. Costa Rica now has an import duty of 7 colones a kilo (about 48 cents a pound).

However, there is an existing and practical possibility of creating a market for United States cheddar cheese in Central American and South American Countries for blending with local cheese for processing.

From the health standpoint, processed cheese would be advantageous as it is pasteurized during the process. Queso blanco in Costa Rica and other areas is a raw milk cheese and is usually consumed within a few days after making. The health of cattle producing the milk and the sanitary conditions of making the cheese are not adequately controlled.

El Salvador

There is a definite shortage of milk and dairy products in El Salvador. Recombined milk, as such, and for manufacture of cheese and ice cream could be used advantageously.

El Salvador has an estimated population of about 2,000,000 people. There are about 3,500 farmers who own approximately 65,000 cows which produce approximately 230,000 bottles, (350,000 pounds) of milk per day during the rainy season. The production is about 130,000 bottles (200,000 pounds) during the dry season.

The price of milk in San Salvador is high, and there are only two pasteurizing plants. One plant sells about 1,000 bottles (3/4 liter) of milk standardized to 3.2 percent fat for 57 centavos (23 cents) per bottle or 30 cents per quart. About 100 gallons of chocolate milk, made from powdered skim (a United States product) per day, and about 100 gallons of ice cream are also sold per day. The management is planning to produce recombined milk, using a United States spray-dried, nonfat milk and fresh cream, standardizing to 2.7 percent. This milk may sell for approximately 40 to 45 centavos (16 to 18 cents) per liter. The plant has been operating about 8 years.

The other plant (which started operation about the first of the year) makes a filled recombined milk product from United States spray dried nonfat and United States vegetable fat. This "milk", known as "Melow", contains 3 percent fat. About 400 gallons is sold a day at 60 centavos (24 cents) per quart in paper bottles. About 120 quarts of chocolate skim milk a day is also made. In addition the company has two soft-serve ice cream freezers in operation in the city, and expect to make hard, filled ice cream with an Emory-Thompson freezer in the near future. All of the product is a "filled" product utilizing nonfat dry milk and vegetable fat.

The Producers Cooperative in El Salvador is interested in building a milk plant and using recombined milk to supplement its fresh milk as needed to furnish a constant supply of milk. It would like to have the El Salvador Government obtain nonfat dry milk and anhydrous milk fat under United States Public Law 480 and to have the government make the accrued local currency available as a loan for the new plant.

It appears that El Salvador could import United States nonfat dry milk and anhydrous milk fat to good advantage to use until its own dairy industry is developed sufficiently. Present milk production is about 2.8 ounces of milk per capita per day during the flush season (6 months) and 1.6 ounces per capita per day during the dry season (6 months). The use of recombined milk to supplement the local milk supply, would not only permit the producer organization to pay producers the present prices for their milk. It would also provide more milk to sell at a reduced price to the consumer, because the recombined milk, mixed with the locally produced milk, could be sold for less than the fresh product. This should increase the demand, and as the dairy industry of El Salvador expanded both in volume and efficiency, less recombined milk would be needed.

Nicaragua

The dairy industry in Nicaragua apparently is growing very rapidly. This year there was no shortage of milk, and the pasteurizing plant in Managua received 50 percent more milk this year than last. In February 1955 its receipts averaged about 8,000 gallons per day, while in February 1956 it was 12,500 gallons. The peak was reached with 17,700 gallons in June 1956. Between 10,000 and 11,000 gallons a day are bottled with a resultant surplus of over 5,000 gallons a day at the peak production.

The surplus was separated for the manufacture of butter and nonfat dry milk. At the time of the survey 4,000 pounds of butter and about 4,000 pounds of nonfat dry milk a day were being manufactured. On July 20 there was an inventory of 87,000 pounds of butter and 466,000 pounds of nonfat dry milk, including 180,000 pounds of United States nonfat dry milk which had been ordered last winter to take care of a shortage which never occurred. Last year the plant had a shortage and had to import supplemental supplies by air from the United States. To prevent this expense this year, an early order for 180,000 pounds of nonfat and 50,000 pounds of butter was placed; then there was no shortage. The 50,000 pounds of butter had been disposed of, but the nonfat was still on hand.

The plant has found no single reason for this sudden increase in production, but belief is that it was primarily due to the producer not keeping as much milk at home. Another factor is that there are about 50 more producers this year than last (about 350 compared to 300); however, this is only about a 16-percent increase. There is no record of the number of cows, but the plant thinks the number probably is somewhat greater. Better feeding and better cows may also have been contributing factors.

This modern plant at Managua was selected to demonstrate the manufacture of queso blanco cheese from recombined milk. Two batches of queso blanco from United States low-heat, spray-dry, nonfat milk and anhydrous milk fat was made very successfully.

The second batch was slightly better than the first, as a result of using a little more starter, rennet and salt. The plant had made queso blanco from fresh milk to which had been added some nonfat dry milk, but none had ever been made from recombined milk.

The plant procedure established was as follows: 1/

11 percent or 11 pounds (5 kg.) of low heat nonfat spray dry milk was added to 86 pounds (39 kgs.) of good quality drinking water at 70 to 80°F. (21-27°C). Mix the resulting skim milk thoroughly and heat to 140°F. (60°D) for 10 minutes. Draw off about 3/4 of milk. Add 3 percent or 3 pounds (1.36 kg.) of anhydrous milk fat to the remaining $\frac{1}{4}$ of milk and homogenize at 500 pounds (225 kg.) pressure. Mixe the two lots of milk (skim and whole) in the cheese vat, and cool to 94°F. (34.5°C). Add 0.5 percent or 0.5 pounds (0.225 kg.) of a good quality lactic starter, stir thoroughly and allow to set for 30 minutes. Add 5 ml. of a saturated solution of calcium chloride per 100 pounds of milk, stir thoroughly. Add rennet extract at the rate of 3 ounces diluted in 100 ml. of cold water, to 1,000 pounds (454 kg.) of milk, or dissolve rennet tablets at the rate of $1\frac{1}{2}$ (1 - 75 liter strength) per 100 pounds (45.5 kg.) of milk in 100 ml. cold water. Add to milk and stir thoroughly. This should give a firm coagulation and be ready to cut in 45 to 60 minutes time. When firm, cut vertically, lengthwise and crosswise with $\frac{1}{4}$ to $\frac{1}{2}$ inch cheese knife. Allow the curd to set undisturbed for 15 minutes, then stir gently with rake, dip curd into hoops or perforated cheese forms lined with cheese cloth. Turn the cheese after $\frac{1}{2}$ hour. At the end of another half hour, remove curd from hoops or forms and break up curd and salt, using salt at the rate of 8 to 9 percent of curd weight, at this stage, or 1.5 - 1.75 pounds (0.7 - 0.8 kg.) to curd obtained from 100 pounds (45.4 kg.) of above milk. Rehoop and press over night, using 10 to 25 pounds (5 - 11 kg.) weights. Turn cheese each hour, for first two hours after salting. About 13 pounds (6 kg.) of pressed cheese per 100 pounds (45.5 kg.) of milk was obtained.

In making cheese from recombined milk, it is necessary to add soluble calcium salt at the rate indicated to replace calcium made insoluble during the milk drying process. Otherwise the curd will be too soft and cannot be cut and will not drain readily.

The milk fat must be homogenized at low pressure (500 psi) into only 20 to 25 percent of the milk used. If homogenized into all of the milk, the curd will be too soft to cut and will not drain readily.

Only 6 percent salt according to curd weight, but it was found that the consumers in Central America preferred higher salt. Eight to nine percent was preferred.

Some of the processed queso blanco that was made in Cartaga, Costa Rica, was sampled in Nicaragua with a great interest. There is also a good possibility that some United States cheddar cheese may eventually be used for blending with queso blanco. When a fresh milk shortage exist, queso blanco may be made from recombined milk in any of the Central or South American Countries.

1/ The author wishes to acknowledge and express his appreciation to Dr. W.J. Harper of the Dept. of Dairy Technology, at Ohio State University, for the assistance given in experimental work done in developing this procedure on a laboratory research basis at OSU.

Summary

The manufacture of ice cream from U.S. nonfat dry milk and anhydrous milk fat was demonstrated in Panama and the sale of these ingredients for making ice cream is assured.

There is the possibility that United States cheddar cheese will be ordered to blend with queso blanco for making processed cheese in Costa Rica.

There is definite need for recombined milk in El Salvador to supplement the limited, local supply, until such time as the local supply becomes adequate.

A practical plant procedure for manufacturing queso blanco cheese from U.S. nonfat dry milk and anhydrous milk fat was established. This procedure can be used during periods of short milk supply in any Central and South American Country to fill the local market demand for cheese.

243
7
12

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D. C.

LIBRARY
CURRENT SERIAL RECORD
OCT 1 1956
U. S. DEPARTMENT OF AGRICULTURE

FD 9-56

August 2, 1956

THE POSSIBILITY OF MARKETING U. S. DAIRY PRODUCTS IN BRAZIL

By D. R. Strobel 1/

Introduction

In Brazil as elsewhere in Central and South America, the per-capita consumption of milk and dairy products is low, based on U. S. standards. The country has a population of approximately 60,000,000 with an estimated per-capita milk and dairy product consumption of less than 6 liters per month based on official population and production estimates.

As with other countries in this position, there apparently are opportunities to supplement the normal supply with recombined milk, utilizing United States nonfat dry milk and anhydrous milk fat. However, under the present monetary control and the grouping of import items into categories with various exchange rates applying to the different categories, the dollar cost of the ingredients for recombining would be too high to permit their purchase.

At present, butter and cheese are classed as luxury products in category 5 and, as such, the dollar exchange rate for these items is very unfavorable for importation. Anhydrous milk fat or concentrated milk fat probably would fall in this category. For the week ending June 23, 1956 at the exchange auction in Sao Paulo, the mean bid for Category 5 was 291.00 cruzeiros per U. S. dollar. Nonfat dry milk for industrial use is listed in Category 4.

In this category for the week ending on the above date, the mean bid was 204 cruzeiros per U. S. dollar. The most favorable categories for dairy products were 1 and 2. Dry whole milk modified for child feeding is under Category 1. The mean bid for this category for the week ending

1/ The author, who is Chief of the Foreign Marketing Branch of the Foreign Agricultural Service, acknowledges the valuable assistance and information supplied by the Agricultural Attache and his staff, and other United States Government representatives abroad; and local Government officials and members of the dairy industry in the country surveyed.

June 23 was 82.83 cruzeiros per U. S. dollar. Dry whole milk and skim milk for retail sale is listed under Category 2, with a mean bid of 126.81 cruzeiros per U. S. dollar. At the time of the completion of the survey in Brazil, on July 16, 1956 the official exchange rate was 18.81 cruzeiros per U. S. dollar. The official rate of the currency must be added to the mean bid to establish the import rate. The free rate of exchange during the time of the survey fluctuated from 80 to 83 cruzeiros per U. S. dollar. It, therefore, appears that the promotion of United States dairy products in Brazil would necessitate either a change by the Brazilian government, providing for sale for dollars at lower prices, or for sale of the U. S. products for cruzeiros under Public Law 480 without the use of dollars. Under a Public Law 480 sale, a rate of exchange more favorable than the official rate would be necessary for the products to be competitive on the Brazilian market.

The methods of processing, control and distribution of milk in various Brazilian cities vary greatly. It is claimed that, with few exceptions, the dilution of milk with water is widely practiced. There appears to be a lack of proper sanitary procedures for the handling of milk on the farms. This observation is based on methods and prodedures used at country receiving stations to assure that the raw milk arrives at the city processing plant in a condition which permits processing.

A program that would establish confidence in milk at the consumer level would undoubtedly result in the sale of a much greater quantity of fluid milk. There appear to be ample supplies of sweetened condensed milk, butter, cheese and dried whole milk at the present retail prices. These prices, however place these products as luxury items not accessible to the mass market. However, it was stated that in some areas more butter and cheese could be sold during the period of short milk supply if it were available.

Recombined milk as a supplemental supply, provided the ingredients are procured under Public Law 480, would be feasible for certain markets. Each state in Brazil and the Federal district have established minimum wages. During this survey, these minimum wages were being revised in all areas visited. A minimum wage as low as 1,550 cruzeiros ($19.22) per month was reported. The highest revised minimum wage was reported to be 3,800 cruzeiros ($47.12) per month. The producer price for milk was reported to be from 3.6 to 3.8 cruzeiros (4.5 to 4.6¢) per liter. In two major markets, the producers are endeavoring to have the price increased. The producer price for milk and the retail price for fluid and dry whole milk are established by the government. The retail price for milk varied by grade from approximately 6 cruzeiros to 10 cruzeiros (7.4 to 12.4¢) per liter. 2/ The higher price is for an established Grade A milk which was estimated to constitute less than 2 percent of all milk retailed. The average production per cow in the milk producing areas was given as 905 liters per year.

2/ 1 liter = 1.057 U. S. liquid quart.

Rio de Janeiro

Rio de Janeiro, with a population of between 2½ and 3 million is reported to have a dairy milk supply of approximately 400,000 liters (.13 to .16 liter per capita). Of this supply, approximately 110,000 liters are pasteurized and sold in bottles. The remaining milk is reported sold in bulk by milk peddlers who sell it from approximately 200 liter tanks. The producer price is 3.8 cruzeiros (4.6¢) per liter. It was reported that the pasteurized bulk milk is sold to the vendor for 5.3 cruzeiros (6.5¢) per liter, who then sells it from his tank to the consumer at 6.1 cruzeiros (7.5¢) per liter. The bottled milk retails for 7.1 cruzeiros (8.8¢) per liter.

In 1942, the government began the construction of a pasteurizing plant for Rio de Janeiro. It was designed to have 3 separate processing units each capable of processing 300,000 liters of milk per day. At present only one section is set up and operating, and has a daily output of only 230,000 liters. The plant is operated as a cooperative and additional equipment is being installed. Three butter churns each with a 800-kilo capacity per churning are being installed. Two roller dryers have been installed. The equipment is of Danish and Dutch origin. If sanitary regulations governing the handling and distribution of milk were promulgated and enforced in Rio de Janeiro, approximately 3 times the present supply of bottled, pasteurized milk could be available to the Rio market with the present plant facilities. If the other two 300,000 liter per day units are installed, this plant could more than adequately supply the total present market with bottled, pasteurized milk.

There is in the city a very modern, efficient, ice cream plant that is placing a good quality product on the market. A 3½-ounce ice cream cup was selling for 6 cruzeiros (7.4¢), and an Eskimo pie for 4 cruzeiros (4.9¢). Company representatives stated they had an ample supply of fat and nonfat to meet their production needs.

Representatives of the cooperative operating the milk plant expressed no interest in supplementing their milk supply by recombining. The producer organization is at present endeavoring to obtain an increase in the producer price for milk.

Sao Paulo

Sao Paulo with a population of approximately 3,000,000 people has an estimated daily milk supply of 400,000 to 500,000 liters (.13 to .17 liter per capita). The bottled and pasteurized milk is sold, at a retail price of 6.70 cruzeiros (8.3¢), (including 60 centavos city tax) per liter.

A very small percentage of a higher grade milk sells above this price. Two plants were visited having a total output of 430,000 liters a day. One plant was comparable to a United States plant in efficiency, maintenance, clean up, and control of production.

In addition to the plant visits, meetings were held with two producer organizations. The producers are seeking an increase in the present producer price of 3.70 cruzeiros (4.5¢) per liter. They were concerned regarding the effect that any United States dairy products entering Brazil at this time would have on their negotiations for a higher producer price.

There is apparently an even supply of fluid milk to the Sao Paulo market. However, maintaining this supply, necessitates the curtailment or actual cessation of drying, churning and cheese making operations located outside of Sao Paulo so that this milk can be diverted to the fluid market. The season of short supply to the manufacturing plants extends from 4 to 5 months. The opinion was expressed that in spite of this diversion of milk from manufacturing to fluid uses there was at times a shortage in the city. It was also stated that more butter and cheese could be sold if the manufacturing plants could be kept operating the year around. An apparently well-informed individual stated that the market could readily absorb an additional 50,000 liters of milk per day.

It is therefore, practical to consider recombined milk as a supplemental supply for the Sao Paulo area during the season of short supply. If there is opposition to supplementing for fluid use, then nonfat dry milk and anhydrous milk fat should be used as the basic ingredients in the manufacture of cheese, sweetened condensed milk, and ice cream and thus make available to the city an adequate fluid milk supply. It is apparent that during the short period, if milk were not diverted from the manufacturing plants, the city could absorb 100,000 to 200,000 liters of recombined milk daily. With an organized promotional program, the milk consumption could be further increased.

Some sources maintain that if there is a milk price rise there will be a great increase in milk production. Others feel that even with the higher price, the shortage of feed concentrates would continue to limit milk production, and that the potential market would continue to be greater than the possible supply.

The ice cream company that operates in Rio de Janeiro also operates in Sao Paulo and supplies a good product for this market.

Salvador

Salvador with a population of approximately 400,000 has a non-bottled, raw milk supply estimated from 12,000 to 30,000 liters per day. (.03 to .075 liter per capita) It was reported to retail from 8 to 10 cruzeiros (9.9 to 12.4¢) per liter.

State government officials appeared anxious to increase the milk supply available to the city. A plan using recombined milk was included in a report prepared by the state, and it was further reported that the state had asked that ingredients for recombined milk be included in the first Public Law 480 agreement between the United States and Brazil.

The government officials stated that they would support any arrangement that would provide a plant for the city. They appeared favorable to a joint U. S.-local investment, cooperative venture. It was suggested that the state officials request through their federal government that recombining ingredients be included in the Public Law 480 program under consideration. It was explained how, if the federal government desired, local currency accruing under Public Law 480 and loaned to Brazil under Section 104(g) could in turn be loaned by the Brazilian government to private individuals for the erection of a recombining plant in Salvador. The state government officials requested follow-up assistance from the Agricultural Attache's office.

A visit was made with the owner of a small pasteurizing plant located 140 kilometers from the city of Salvador. The owner reported that he was pasteurizing 15,000 liters of milk a day that was sold non-bottled in the surrounding area. He said he planned to move his plant to Salvador where there would be a larger market. He appeared interested in supplementing his supply by recombining at that time. His plans also included the installing of bottling equipment.

A modern sales outlet for the sale of butter and cheese was visited in Salvador. Butter and cheese are manufactured in a plant located in the state and brought to the sales outlet in the city. The operator of this sales store stated that he was planning, in the near future, to bring in approximately 2,000 liters of raw milk, bottle it on the premises and sell it in the city. It was noted however, that in the room where this is to be done there is no refrigeration, water, power, or drainage facilities for such an operation.

Recife

Recife, with a population of approximately 600,000 has a daily milk supply estimated at 35,000 liters of raw, non-bottled milk (.058 liter per capita). The retail price was stated to be 8 cruzeiros (9.9¢) per liter.

Recife has a pasteurization plant that first opened in 1941. It was reported that the plant had been closed in 1951 due to inefficient operation which resulted in great loss and damage to the plant and equipment. The plant, when first opened, was operated as a municipal plant and then by a producer cooperative until it closed. New equipment has been purchased recently by the government which hopes to open the plant again as a municipal operation in October. It is generally agreed however, that all the new equipment will not be installed and in operating order by this time. The physical plant facilities are excellent. The new equipment is principally of European make but U. S.-made storage tanks have been installed. A short time, high temperature pasteurizer with a capacity of 6,000 liters per hour is now in the plant. Plans are to increase the capacity to 10,000 liters per hour by adding plates to this unit. An additional 10,000 liters per hour unit has been ordered. Among the installed equipment are two, 12,000 liter raw milk storage tanks; three, 8,000 liter storage tanks for the pasteurized milk; two, 4,000 liter per hour bottlers; three, $7\frac{1}{2} \times 7\frac{1}{2}$ compressors;

two small compressors (one, 4 x 4; one, 3 x 3); straight-away can washer; weight can; receiving tank; small brine tank for manufacture of block ice; and milk and butter storage rooms in which the insulation and refrigeration units have to be installed. The plant has an adequate water supply and adequate generator capacity. Two boilers have been ordered but have not arrived. With proper technical management, this plant has the production capacity to supply not only the immediate market but also an expanded market in the city of Recife.

An ICA technician located in Recife is working with the state in establishing receiving stations out in the country. The building for the first receiving station, located 50 kilometers from the city, with adequate water and power supplies, is in existence from previous operations. New equipment has been ordered for it and for other stations planned for the area.

The first receiving station will have 38 producers delivering milk with a possible volume of 2,000 liters a day. The milk will be tested and cooled at the receiving stations and then delivered to the plant. The plan seems sound and should greatly assist in developing a good milk supply for the city. However, it appears that a supplemental supply of recombined milk would be of a service to this area until the local supply has been expanded. The present plan, which has not been finalized, provides that the producers will deliver the milk to the plant which will pasteurize and bottle it for the producers, who will then take over the distribution of the milk in the city. The processing and distribution of the milk should be satisfactorily organized so that there would be no divided responsibility. The possibility of locating refrigerated display cases throughout the city to which the plant would make deliveries was explained and suggested as a solution to the distribution problem.

State officials seemed to give favorable consideration to the possibility of supplementing the local supply with recombined milk.

Belem

Belem, with a population of approximately 300,000, has an estimated raw, non-bottled daily milk supply of 12,000 liters (.04 liter per capita). The milk is produced principally within the city limits by small herds of cattle housed in sheds behind the owners' houses. The owners peddle the milk from small horse-drawn carts.

In 1950, a small pasteurization plant was opened in Belem with a capacity of 10,000 to 12,000 liters of pasteurized, bottled milk a day. The owner and operator reported that he had had a year's experience in a United States dairy plant. A 1952 report of the Consulate stated that the pasteurizing plant was having difficulty in obtaining milk because the local producers refused to submit their milk to plant tests. A 1955 report from the Consulate stated that the city had a proposed project to require all milk to be pasteurized and the project plans included a pasteurization plant with a capacity of 20,000 liters. No action has been taken so far on this proposal. At present, the output of the pasteurization plant is

approximately 1,000 liters. For the last 6 months, the owner has rented the plant to another individual. Inspection of the plant revealed that the recording thermometers were not used and that a better job of equipment clean-up and maintenance could be done.

State government officials were visited and appeared to be interested in the milk situation and expressed a desire that more milk be available to the city. A supplemental supply, with ingredients provided under Public Law 480, of recombined milk was explained. The director of the independent agency for the Economic development of the Amazon area was also visited. Recombined milk and the possibility of obtaining the ingredients under Public Law 480 was explained. Interest was also shown at this meeting. The government contracts requested that the Agricultural Attache's office send a summation of the possibilities of the use of recombined milk in the area.

Retail Prices

Dry whole milk, Nestle, 1-pound can 41.30 to 45 cruzeiros (49.5 to 54¢); Vigor (Brazil) 1-pound 26 percent, 39 cruzeiros (46.8¢); Moccoca (Brazil) 370-gram can, 26 percent, 35 cruzeiros (42¢). The Nestle milk under various brand names had fat contents of 12 percent, 24 percent and 26 percent butterfat. The low fat milks were modified milks having a change in quantity and type of sugar content. Danish, 1-pound can, fat content 26 percent, 45 to 52 cruzeiros (50.4 to 62.4¢), 5-pound can, 24 percent to 26 percent fat, 185 to 240 cruzeiros ($2.22 to $2.88). Sweetened condensed milk Nestle, 14 to 15.4 cruzeiros per can (16.8 to 18.4¢ per can). Evaporated milk Nestle, 12.5 to 15 cruzeiros per can, (15 to 18¢); Domestic cheese, 45 to 150 cruzeiros per kilo 3/, depending on quality and type (54¢ to $1.80); Domestic processed cheese, 20 cruzeiros for 250 grams, (24¢); 80 cruzeiros (96¢) per kilo; Butter 94 to 104 cruzeiros per kilo ($1.12 to $1.24 per kilo).

Dry Whole Milk Utilization

The 1954 production of dry whole milk was reported to be between had 17,000,000 and 18,000,000 kilograms (37.5 - 39.7 million pounds). Import records show 2,606 metric tons of dry whole milk (5,745,188 pounds) been imported from Denmark in 1955. Danish export figures show that from January through March, 1956, 1,281 metric tons of dry whole milk (2,824,093 pounds) have been exported to Brazil

3/ 1 kilo = 2.2 pounds.

Summary

United States nonfat dry milk solids and anhydrous milk fat, could be profitably imported if brought into Brazil under Public Law 480 at present prices prevailing in the U. S. and in Brazil with a favorable cruzeiro exchange rate, as now applicable under the present Public Law 480 agreement, i.e. 50.06 cruzeiros per U. S. dollar. Under these conditions nonfat and fat could be utilized to supplement the normal supply of milk and dairy products in certain areas of the country. However, at present there appears to be no immediate dollar market for United States dairy products in Brazil.

With the present revision of minimum wages, population increase, and the general expansion of business, it appears that in the future the domestic market for dairy products will expand. The market may expand more rapidly than it will be possible to increase domestic production. Therefore, if the present barriers to imports of dairy products from the United States were reduced or eliminated, there is the possibility of a market for United States products. If United States dairy products can be placed on the Brazilian market now, under a program not involving dollar expenditure, the products and recombined milk made from them would be known and readily acceptable when the commercial market develops.

It would be advantageous to determine the actual production and the production potential with improved feeding and breeding programs, of the present dairy cattle population of Brazil. A detailed study of all aspects of the dairy industry would also be useful in determining the future market possibilities.

The existence and enforcement of regulations assuring the consumer a safe dairy product varies by areas. The promulgation of practical health regulations controlling the distribution of all fluid milk in cities is a necessary step to build consumer confidence in the product. After consumer confidence has been established, effective promotional campaigns could greatly increase the per-capita consumption of fluid milk and dairy products.

Producer organizations in the major milk markets are endeavoring to obtain an increase in the present government controlled producer price of 3.7 to 3.8 cruzeiros (4.5¢ to 4.6¢) per liter. As a result of this situation, the import of any dairy products from the United States at this time was not looked upon with favor by these groups.

943
U7
b.2

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D.C.

LIBRARY
OFFICIAL RECORD
OCT 1 1956
U. S. DEPARTMENT OF AGRICULTURE

FD-8-56 July 23, 1956

INTERNATIONAL TRADE IN DAIRY PRODUCTS IN 1955

SUMMARY

Overall, world trade in dairy products showed a substantial increase in 1955, after the slight decrease registered in 1954. Data reported by selected countries of the world, show that the only decline occurred in cheese trade. Dried milk, the only dairy product to show increased trade in 1954, registered a 16-percent gain in 1955 and 1954. Canned milk and butter exports were up 12 percent and 8 percent, respectively.

The United Kingdom increased its butter imports in 1955 to the highest level since World War II. Its imports were 10 percent larger than in 1954. Increased imports were necessary, largely because of increased per capita consumption of butter and partly because domestic butter production was lower than 1954 because of drought conditions in the latter part of the year. United Kingdom cheese imports decreased 7 million pounds in 1955, and this decline largely accounted for the overall decrease in world cheese trade. In July 1955, the last of the United Kingdom bulk contracts was abrogated; and Australia, like New Zealand and Denmark in 1954, entered the free market. It has been reported that these former contract countries have now banded together in a vigorous dairy products advertising campaign in the United Kingdom.

Asia continued as the world's largest canned and dried milk market. The United Kingdom, a major importer of condensed, evaporated and dried milk as late as 1953, continued its high level of canned milk exports in 1955 and severely cut dried milk imports.

United States exports of all dairy products showed considerable gain over 1954. To a large extent, this gain was due to government program sales of butter, cheese, and nonfat dry milk. Evaporated and dry whole milk, competitively priced commercially, both showed increases; some of the increased movement was made through purchases under the International Cooperation Administration programs and 2.5 million pounds of evaporated milk was exported under Title 1 of Public Law 480.

Some of the gains in reported U. S. exports of butter, cheese and nonfat dry milk were the result of reduced price sales of government stocks for export. However, the bulk of the shipments continued to be under government programs. In addition to the exports reported by the U. S. Department of Commerce, there were large overseas shipments of these commodities as donations for relief; these export shipments are

discussed in detail in another Foreign Agriculture Circular 1/. The amounts of these unreported shipments for relief purposes are as follows: Butter, 51 and 203 million pounds respectively in 1954 and 1955; cheese, 29 and 154 million pounds in 1954 and 1955, respectively; and nonfat dry milk, 92 and 330 million pounds in 1954 and 1955, respectively.

Butter

World butter exports in 1955 were up 8 percent over the preceding year and totaled more than 1 billion pounds for the reporting countries. The increase was due almost entirely to an increased volume leaving the ports of Oceania. Australia's exports totaled 181 million pounds, the highest postwar figure recorded, and New Zealand's totaled 348 million pounds, respective increases of 125 and 51 million pounds over 1954. The United States and Canada also showed significantly larger export figures for 1955.

The effect of summer drought was reflected in butter shipments from the principal Western European suppliers. Denmark's shipments dropped from 313 million pounds in 1954 to 283 million pounds in 1955. Sweden's exports were about one-third of the 1954 figure, and stood at 8 million pounds in 1955. Exports from the Netherlands declined 15 percent and totaled 98 million pounds. Finland and Austria, both net exporters in 1954, reverted to net importers in 1955. France, a heavy exporter of butter early in 1955, found it necessary to import substantial quantities later in the year. Irish exports were only 40 percent of 1954. Exports from Argentina declined 21 percent from 1954 because of the loss of East European markets.

Data from the Union of South Africa indicate that the Union became a net exporter of butter in 1955, whereas, in 1954, it was a net importer. The change in status is not due to any large increase in exports. It occurred because the Union no longer shows, as imports receipts of butter received by the Dairy Control Board from South-West Africa, a trust territory of the Union.

Germany, Belgium, and Greece, in addition to the United Kingdom, showed substantial increases in butter imports. Switzerland, considering the optimum situation to be one of butter importing and cheese exporting, increased its 1955 butter takings by almost 3 times the 1954 figure to 13 million pounds. Yugoslavia imported 16 million pounds in 1955, all from the United States as relief donations under Section 416 of the Agricultural Act of 1949 1/.

The Asian markets showed slight increases in their receipts of butter, but these were counterbalanced by a 50-percent decrease in Israel's 1955 imports.

1/ See Foreign Agriculture Circular, FD 7-56, June 29, 1956.

Cheese

Net cheese trade among specified countries of the world showed a 2-percent decrease to just under 800 million pounds in 1955. Decreased cheese exports from Oceania were balanced by increased shipments from North America. Cheese exports from Australia stood at 47 million pounds during 1955--down 19 million pounds--and New Zealand's exports of 188 million pounds were also 19 million pounds under the preceding 12-month period. Cheese exports from the United States rose to 23 million pounds, and Canadian exports rose to 13 million pounds during 1955.

The major European exporters showed decreased cheese exports during 1955; Denmark, the heaviest loser, was 12 percent under 1954. Slight increases, however, were registered in Finland, France, Italy and Norway. The United Kingdom increased its exports by over 3 million pounds and decreased imports by 7 million pounds. The Republic of Germany, second largest world cheese market, imported over 141 million pounds during 1955 --a 10-percent increase over the previous year. Austria became a net exporter in 1955, while Sweden became a net importer.

Israel took only two-thirds as much cheese in 1955 as it purchased in 1954. Syria remained the only cheese exporter of any significance in Asia. The Union of South Africa, after experiencing an unprofitable cheese export year in 1954, cut its exports in half during 1955, while the major African markets showed little change in their takings.

Processed Milk

World exports of canned milk rose 12 percent over 1954 and stood at almost 950 million pounds in 1955 for the reporting countries. The increase was distributed among the major exporters with the two largest, the Netherlands and the United States, both showing 30-million pound increases. The United Kingdom, which became a major exporter in 1954, firmed this position in 1955 by registering the largest increase, almost 41 million pounds, and moved ahead of Denmark as an exporter of this dairy product.

Asia, the principle canned milk-importing continent, took almost half the world exports. Aside from Asian countries, Cuba remained the largest canned milk market in 1955 and increased its imports of this product by 75 percent over the previous year. The increase was primarily in evaporated milk. Algeria again was the largest African market, but imports during 1955 appeared to continue the decline from the high of 17 million pounds imported in 1953.

Dried milk exports during 1955 were almost 600 million pounds, a 16-percent increase over 1954, due almost entirely to increased shipments from the United States. United States exports totaled over 277 million pounds, but a large part of reported American shipments continued to be for relief purposes under UNICEF programs. Exports from the Netherlands during 1955 were 74 million pounds, 4 percent over 1954. Australia

registered a 20-percent gain with exports of 64 million pounds in 1955. An all-time high of 31 million pounds of dried milk left Danish ports in 1955 to place Denmark among the world's leading dried milk exporters.

Sweden, New Zealand, and Canada continued to show declines in dried milk exports, but the largest absolute drop was registered by Belgium, which reported shipments of just under 16 million pounds—down more than 5 million pounds from 1954.

India increased its dried milk takings by 50 percent of the 1954 figure and became the leading dried milk importer. Last year's leading market, the United Kingdom, decreased its intake by 31 percent and dropped to second place as a dried milk market.

The outlook for world trade in dairy products during 1956 appears bright.

During the first few months of 1956, exports from primary dairy countries were running somewhat higher than comparable 1955 shipments for butter and cheese. Condensed and evaporated milk was in good balance with 1955 exports, with the United States showing some increase in exports. Early indications are that dry milk exports may not be as high in 1956 as in 1955, but will probably exceed 1954 shipments.

BUTTER: International Trade in specified countries, Averages 1934-38, 1946-50, Annual 1954 and 1955, Preliminary

Continent and Country	Averages 1934-38 Exports	Averages 1934-38 Imports	Averages 1946-50 Exports	Averages 1946-50 Imports	1954 Exports	1954 Imports	1955 Exports	1955 Imports
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
NORTH AMERICA								
Canada	1/ 6,643	1/ 1,114	2,239	4,134	143	3	7,403	12
Mexico	2/	1/ 172	2/	205	—	345	—	378
Panama, Republic of	—	1,799	—	3/ 1,275	—	1,349	—	1,297
United States	1,152	9,307	4,982	2,258	3,343	962	22,499	742
Cuba	4/ 610	4/ 23	2/	946	—	238	—	1,695
Netherlands Antilles	—	452	—	3/ 1,500	—	1,728	—	5/ 1,100
Trinidad and Tobago	—	1,788	—	1,500	56	2,196	45	2,323
SOUTH AMERICA								
Argentina	18,823	64	21,562	—	35,737	—	28,345	—
Brazil	9	—	4/ 7	—	—	15	—	419
Chile	36	64	—	4/ 556	—	2,785	—	6/ 2,860
Colombia	2	1/ 38	2/	4/ 41	—	34	—	13
Peru	2/	311	—	4/ 718	—	3,440	—	3,804
Venezuela	—	798	—	4/ 5,340	—	2,734	—	6/ 2,000
EUROPE								
Austria	5,980	73	2/	4/ 374	5,608	344	323	3,947
Belgium	68	9,930	463	44,948	9	17,304	4	20,697
Czechoslovakia	754	1,918	—	4/ 5,681	7/	5/ 14,896	7/	5/ 21,728
Denmark	328,573	37	245,978	—	313,494	—	283,578	—
Finland	8/ 24,467	8/ 13	—	6,916	7,072	—	—	16,713
France	8,932	3,640	5,211	25,504	6,210	2,970	26,312	15,844
Germany, Republic of	—	9/ 203,465	—	4/ 53,629	13	29,312	31	73,084
Greece	2/	860	—	498	—	2,208	—	7,310
Ireland	51,843	448	3/ 2,851	2/	7,532	1,120	3,019	—
Italy	1,067	2,249	3/ 158	3/ 7,269	44	14,197	28	12,743
Netherlands	109,587	356	62,921	310	114,685	22	98,114	73
Norway	726	2	2,691	3/ 894	3,317	2/	3,764	—
Portugal	141	229	4/ 521	1,774	1,658	—	1,043	235
Spain	5/ 21	5/ 111	7/	7/	—	—	—	—
Sweden	50,547	353	7,051	4/ 833	28,863	—	7,802	—
Switzerland	7	2,033	321	21,590	1	4,476	1	13,074
United Kingdom	1,367	1,074,727	—	606,317	—	629,846	—	693,554
Yugoslavia	282	2/	4/ 35	10/ 55	152	10	89	16,174
U.S.S.R. (Europe & Asia)	46,486	401	7/	7/	7/	5/ 67,760	7/	5/ 2,240
ASIA								
Ceylon 11/	—	963	—	3/ 1,723	—	1,802	—	2,545
India 11/	4,142	6,175	—	4/ 921	—	1,049	—	2,699
Indonesia 11/	—	12,352	—	3/ 800	—	245	—	401
Israel	—	4,826	—	3/ 200	—	18,829	—	9,017
Japan	562	141	—	3/ 300	5	772	2/	414
Lebanon	7/	7/	7/	7/	—	893	8	1,149
Malayan Fed. & Singapore	571	4,078	—	4/ 2,159	226	3,811	224	4,888
Philippines, Republic of	—	1,566	—	4/ 1,609	—	1,669	—	6/ 1,800
AFRICA								
Algeria	12	4,337	—	4/ 4,357	—	9,374	—	6/ 8,800
Belgian Congo	13	800	—	3/ 900	—	2,946	—	6/ 3,500
Egypt 11/	119	1,140	3/ 54	3/ 1,500	26	342	—	272
Fed. Rhodesia & Nyasaland	12/ 289	12/ 116	12/ 51	12/ 863	81	5,179	—	3,995
French Morocco	—	13/ 1,958	—	4/ 815	—	7,103	—	6/ 7,200
Union of South Africa	14/ 6,192	14/ 3,291	396	7,139	3,348	4,233	3,966	—
OCEANIA								
Australia	220,151	2	164,318	—	106,817	—	180,876	—
New Zealand	308,895	2	291,200	—	297,127	—	347,747	—

1/ Average for 1935-39. 2/ Less than 500 pounds. 3/ For 1950. 4/ Less than a 5-year average. 5/ Derived data. 6/ Annual estimate based on data for 11 months or less. 7/ Not available. 8/ For 1934. 9/ For 1937. 10/ For 1948. 11/ Includes Ghee. 12/ Southern Rhodesia only. 13/ For 1938. 14/ Year ending August 31.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches and other information.

CHEESE: International Trade in Specified Countries, Averages 1934-38, 1946-50, Annual 1954 and 1955, Preliminary

Continent and Country	Averages 1934-38 Exports	Averages 1934-38 Imports	Averages 1946-50 Exports	Averages 1946-50 Imports	1954 Exports	1954 Imports	1955 Exports	1955 Imports
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
NORTH AMERICA								
Canada	1/ 79,700	1/ 1,342	63,530	3,176	5,006	5,943	13,436	12,715
Mexico	15	895	164	858	10	1,494	6	1,338
Panama, Republic of	—	348	—	2/ 700	—	763	—	3/ 566
United States	1,260	54,279	99,706	28,874	5,378	49,958	22,897	51,948
Cuba	13	4/ 428	—	629	—	2,453	—	2,551
Netherlands Antilles	2	611	—	2/ 1,100	—	1,296	—	3/ 1,200
Trinidad and Tobago	—	600	—	2/ 1,400	18	1,560	13	1,917
SOUTH AMERICA								
Argentina	3,406	110	25,258	—	7,418	—	6,768	—
Brazil	4	362	5/ 2	4/ 1,332	—	88	—	—
Chile	62	48	—	4/ 15	—	35	—	6/ 30
Colombia	2	37	—	4/ 10	—	591	—	133
Peru	—	688	—	4/ 404	—	1,254	—	441
Venezuela	13	1,235	—	4/ 7,105	—	10,541	—	6/ 12,000
EUROPE								
Austria	6,720	1,818	4/ 1,675	4/ 1	6,991	3,302	4,791	4,457
Belgium	344	50,563	4/ 1,182	59,937	665	75,273	774	74,474
Czechoslovakia	1,909	2,706	4/ 831	4/ 518	7/	3/ 4,770	7/	3/ 2,576
Denmark	18,067	33	46,558	31	130,512	1,493	114,428	1,098
Finland	11,651	31	5,732	—	24,910	—	25,498	—
France	25,039	30,867	23,948	23,485	41,063	18,772	42,622	20,558
Germany, Republic of	—	4/ 22,000	4/ 4,940	4/ 72,754	13,203	128,988	14,798	141,324
Greece	621	800	—	7,665	—	8,178	—	13,904
Ireland	1,509	60	4/ 2,008	4/ 104	496	712	320	621
Italy	53,219	9,669	18,074	8,372	37,703	51,524	42,077	43,203
Malta and Gozo	—	1,647	—	4/ 2,400	—	2,207	—	3/ 1,000
Netherlands	132,358	934	75,467	1,086	203,013	697	196,137	1,922
Norway	4,111	338	712	648	3,353	735	4,311	769
Portugal	143	386	4/ 722	4/ 13	1,126	69	1,162	86
Spain	4/ 117	4/ 2,502	—	4/ 13	6	1,669	9	1,143
Sweden	625	2,473	4,453	5,239	10,340	10,397	6,744	11,487
Switzerland	41,678	3,924	18,011	4/ 3,445	47,496	6,239	46,585	7,780
United Kingdom	2,987	319,028	77	411,820	1,696	295,635	6,414	288,997
Yugoslavia	4,169	55	2/ 26	—	5,163	8	1,842	1,225
U.S.S.R. (Europe & Asia)	84	816	7/	7/	7/	3/ 6,720	7/	3/ 2,016
ASIA								
Ceylon	—	220	—	2/ 500	—	436	—	568
Cyprus	666	88	7/	7/	704	657	373	6/ 800
India	4	1,204	—	4/ 848	—	982	—	1,508
Israel	33	2,138	—	2/ 4,000	—	8,111	—	5,430
Japan	—	159	—	2/ 200	4	1,827	2	2,112
Lebanon	8/	8/	8/	8/	—	5,029	157	5,084
Malayan Fed. & Singapore	22	313	—	4/ 569	—	898	—	969
Philippines, Republic of	—	895	—	1,557	—	3,261	—	6/ 2,800
Syria	553	917	4/ 34	4/ 8,702	2,969	623	3,151	282
AFRICA								
Algeria	82	10,833	—	2/ 18,000	—	24,080	—	6/ 24,000
Belgian Congo	4	337	—	2/ 500	—	1,926	—	6/ 2,000
Egypt	4/ 82	4/ 7,269	4/ 84	4/ 9,000	518	7,535	653	6,890
Fed. of Rhodesia & Nyasaland	9/ 80	9/ 64	9/ 80	9/ 159	17	1,177	—	419
French Morocco	10/ —	10/ 3,439	4/ —	4/ 1,323	—	8,586	—	3/ 9,300
Union of South Africa	11/ 1,465	11/ 496	197	145	3,257	494	1,706	293
OCEANIA								
Australia	21,750	104	50,185	175	52,546	1,352	47,229	6/ 1,990
New Zealand	194,000	2	193,653	—	206,835	—	188,043	—

1/ Average 1935-39. 2/ For 1950. 3/ Derived data. 4/ Less than a 5-year average. 5/ For 1946. 6/ Annual estimate based on data for 11 months or less. 7/ Not available. 8/ Included with Syria. 9/ Southern Rhodesia only. 10/ For 1938. 11/ Year ending August 31.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches and other information.

CANNED MILK (Condensed and Evaporated): International Trade in Specified Countries, Averages 1934-38, 1946-50, Annual 1954 and 1955, Preliminary

Continent and Country	Averages 1934-38 Exports	Averages 1934-38 Imports	Averages 1946-50 Exports	Averages 1946-50 Imports	1954 Exports	1954 Imports	1955 Exports	1955 Imports
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
NORTH AMERICA								
Canada	1/ 19,755	1/ 25	50,552	34	8,051	35	6,621	53
Mexico	—	1/ 614	2/ 3	2/ 1,464	3/ 38	10,289	3/ 58	14,288
Panama, Republic of	—	4,327	—	4/ 3,700	—	10	—	5/ 440
United States	33,837	452	504,310	211	132,830	60	162,812	8
Cuba	6/ 17	4,691	2/ 5	30,780	—	28,213	—	49,343
Netherlands Antilles	—	3,060	—	4/ 6,000	—	5/ 5,880	—	5/ 5,240
Trinidad & Tobago	7/	7/	7/	7/	3/ 92	15,859	3/ 75	14,914
SOUTH AMERICA								
Argentina	46	311	2/ 1,089	—	741	—	7/	—
Brazil	8/ 4	—	2/ 90	—	—	—	—	20
Ecuador	—	—	—	226	—	1,074	—	1,629
Peru	—	3/ 7,833	—	4/ 14,954	—	14,850	—	5/ 16,700
EUROPE								
Austria	3/ 428	3/ 406	2/ 5	2/ 597	—	8	—	598
Belgium	2,202	4,255	2/ 498	2/ 67,487	597	22,624	273	19,416
Denmark	40,439	—	58,941	9/ 44	60,968	—	61,609	—
France	3/ 11,277	2,955	20,168	28,952	31,975	1,774	31,671	2,207
Germany, Republic of	9/	9/	4/ 272	4/ 8,881	3/ 4,932	3/ 9,284	3/ 148	3/ 26,444
Greece	—	4,309	—	2/ 63,532	—	19,117	—	26,892
Ireland	2/ 12,936	2/ 60	17,781	—	2,740	—	1,088	—
Italy	3/ 3,301	344	2/ 800	2/ 32,116	82	661	9	10/ 100
Netherlands	356,087	77	194,670	4/ 148	461,544	46	491,897	181
Norway	4,667	67	113	6	3/ 406	—	3/ 27	3/ 2
Spain	11/ 26	11/ 28	—	17	10	915	7	3
Sweden	8/ 115	8/ 18	1,620	2/ 5,485	2,114	2	3,750	4
Switzerland	12,987	9	4,448	4,585	10,612	3,827	9,951	5,451
United Kingdom	36,002	199,204	8,332	121,455	52,169	8,202	92,859	2,389
ASIA								
Burma	—	8/ 19,945	—	2/ 17,449	—	26,411	—	10/ 31,800
Ceylon	—	7/	—	4/ 8,700	—	11,321	37	13,727
Hong Kong	—	7/	—	4/ 24,000	4,183	17,413	2,733	20,366
India	—	8/ 6,440	—	16,863	—	12,983	—	11,675
Indonesia	—	7/	—	4/ 47,000	—	37,097	—	10/ 35,460
Israel	—	2,000	—	4/ 1,200	—	273	—	336
Japan	3/ 9,800	3/ 1,300	—	4/ 2,600	1,510	360	290	834
Lebanon	7/	7/	95	2/ 1,924	—	1,764	43	996
Malayan Fed. & Singapore	9,000	74,000	—	4/ 66,000	5,790	116,401	6,311	133,939
Pakistan	—	7/	—	4/ 7,200	—	647	—	2,504
Philippines, Republic of	—	40,643	—	75,642	—	141,734	—	10/ 150,000
Thailand	—	21,731	—	4/ 37,000	—	74,126	—	10/ 60,000
AFRICA								
Algeria	—	3/ 5,900	—	4/ 9,300	—	16,767	—	5/ 12,000
Belgian Congo	—	7/	—	4/ 1,300	—	12/ 1,777	—	12/10/ 1,000
Egypt	—	6/ 96	—	4/ 2,700	—	1,417	—	1,660
Fed. of Rhodesia & Nyasaland	7/	7/	—	13/ 1,682	2	3,927	—	5,532
Gold Coast	—	7/	—	4/ 6,300	—	9,088	—	9,466
Union of South Africa	—	3,105	513	2/ 2,786	2,726	648	3,894	238
OCEANIA								
Australia	15,392	—	70,748	2/ 2	43,834	—	55,407	—
New Zealand	6,156	—	20,348	—	13,222	—	13,650	—

1/ Average for 1935-39. 2/ Less than a 5-year average. 3/ Includes dried milk. 4/ For 1950. 5/ Derived data. 6/ For 1939. 7/ Not available. 8/ For 1938. 9/ For 1946. 10/ Annual estimate based on data for 11 months or less. 11/ For 1935. 12/ Sweetened condensed milk only. 13/ Southern Rhodesia only.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches and other information.

DRIED MILK (Whole and Skimmed): International Trade in specified countries, Averages 1934-38, 1946-50, Annual 1954 and 1955
Preliminary

Continent and Country	Averages 1934-38 Exports	Averages 1934-38 Imports	Averages 1946-50 Exports	Averages 1946-50 Imports	1954 Exports	1954 Imports	1955 Exports	1955 Imports
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
NORTH AMERICA								
Canada	1/ 5,580	1/ 431	24,357	4,791	24,688	21	22,012	817
Mexico	—	466	—	10,962	2/	6,426	2/	6,732
Panama, Republic of	—	305	—	3/ 2,000	—	2,622	—	4/ 1,300
United States	4,804	6,055	280,041	2,176	199,234	719	277,241	1,853
Cuba	—	5/	6/ 2	6/ 2,066	—	614	—	750
Netherlands Antilles	—	7/	—	3/ 1,100	—	4/ 1,415	—	4/ 1,250
SOUTH AMERICA								
Brazil	8/ 2	8/ 172	—	6/ 3,481	—	4,696	—	9,581
Ecuador	—	9/ 140	6/ 4	6/ 1,014	—	1,730	—	1,462
Peru	—	2/	—	6/ 684	—	663	—	5,811
Venezuela	—	10/ 1,807	—	6/10/ 45,622	—	10/ 72,208	—	10/11/ 79,500
EUROPE								
Austria	2/	2/	3/ 9	6/ 1,255	—	7	—	4,021
Belgium	12/ 41	12/ 7,741	6/ 851	6/ 12,988	21,195	19,802	15,930	21,471
Denmark	594	—	9,782	6/ 478	25,593	20	30,752	—
France	2/	2,168	1,847	26,279	4,594	4,365	4,442	5,842
Germany, Republic of	4/	4/	3/ 19,851	3/ 8,057	2/	2/	2/	2/
Greece	—	209	—	6/ 26,894	—	1,701	—	13,212
Ireland	627	213	2,935	454	1,723	—	3,389	—
Netherlands	37,223	111	6/ 33,524	6/ 8,276	71,403	8,161	74,039	8,135
Norway	10	90	35	115	2/	2/	2/	2/
Spain	13/ 14	13/ 375	—	1,152	1	64	3	4
Sweden	—	8/ 864	9,758	—	5,168	—	2,998	—
Switzerland 14/	11/ 3,036	—	6/ 2,260	3,927	7,630	3,302	8,448	2,365
United Kingdom	—	30,859	6/ 1,963	6/ 63,388	6,633	108,022	6,987	74,092
ASIA								
Burma	—	7/	—	3/ 1,000	—	766	—	11/ 110
Ceylon	—	7/	—	3/ 2,300	—	2,902	—	3,949
Hong Kong	—	7/	—	3/ 2,200	881	3,765	258	3,141
India	—	1,525	—	6/ 16,665	—	53,213	—	79,672
Indonesia	—	7/	—	3/ 6,500	—	14/ 5,448	—	14/ 8,658
Israel	—	1,268	—	3/ 16,000	—	29,738	—	28,845
Japan	2/	2/	—	3/ 62,000	149	32,183	212	32,938
Malayan Fed. & Singapore	—	643	—	6/ 3,766	170	4,121	192	5,290
Pakistan	15/	15/	15/	15/	—	3,448	—	320
Philippines, Republic of	—	1/ 735	—	3,988	—	5,713	—	11/ 8,500
Thailand	—	7/	—	3/ 4,600	—	1,458	—	11/ 2,200
AFRICA								
Belgian Congo	—	7/	—	3/ 2,300	—	4,301	—	11/ 5,300
Egypt	—	8/ 38	—	3/ 2,082	—	1,646	—	1,791
Union of South Africa	8/ 7	8/ 724	6/ 149	1,071	379	16	343	148
OCEANIA								
Australia	3,324	299	22,558	6/ 141	53,476	—	64,073	—
New Zealand	16,111	—	41,698	—	87,785	—	83,521	—

1/ Average for 1935-39. 2/ Included with canned milk. 3/ For 1950. 4/ Derived data. 5/ Less than 500 pounds. 6/ Less than a 5-year average. 7/ Not available. 8/ For 1938. 9/ For 1939. 10/ Includes canned milk. 11/ Annual estimate based on data for 11 months or less. 12/ Average for 1937-39. 13/ For 1935. 14/ Includes infant foods. 15/ Included with India.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches and other information.

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D.C.

LIBRARY
CURRENT SERIAL RECORD
OCT 1 1956
U. S. DEPARTMENT OF AGRICULTURE

FD-7-56 June 29, 1956

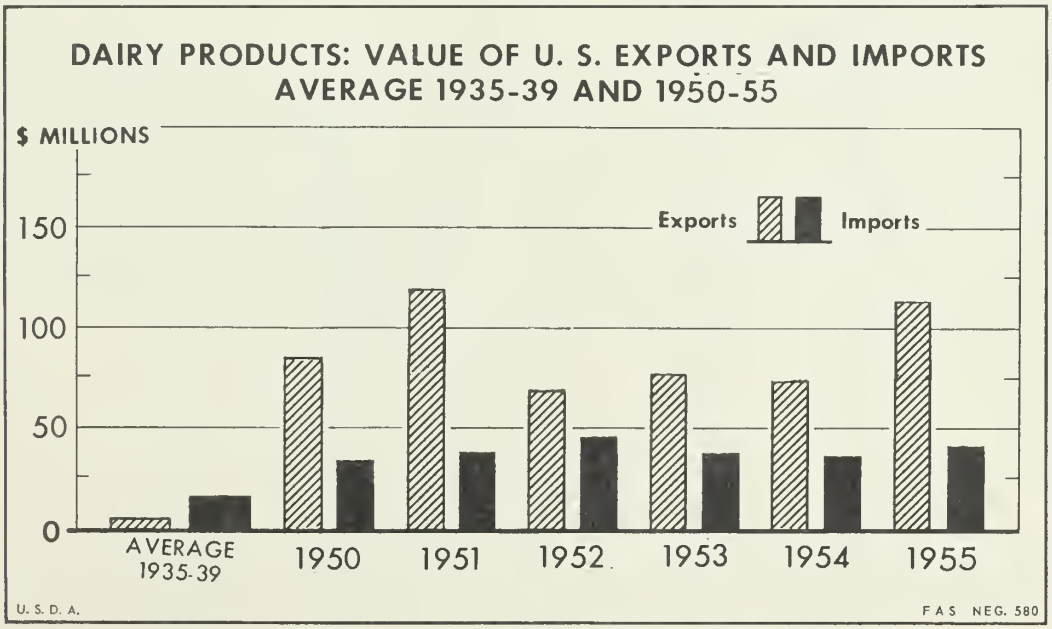
UNITED STATES TRADE IN DAIRY PRODUCTS, AVERAGE 1935-39 AND ANNUALLY 1951-55

SUMMARY

The export trade of the United States in 1955 showed a large increase in both weight and whole milk equivalent, but the bulk of the export shipments was again made through government programs, including relief donations abroad. The value of reported exports showed a considerable gain of almost 40 percent with reported valuation of $113.7 million. As in previous years, the processed milk group continued to make up the bulk of commercial dairy exports; more than 75 percent of the reported dollar value of exports was contributed by processed milks. While butter and cheese made substantial export gains in 1955 over the previous year, much of the increase was registered through stepped-up government program shipments.

After 2 consecutive years of declines, the value of imports showed a gain of 13 percent in 1955 over 1954; imports were valued at $41.1 million. For the third consecutive year, cheese and casein accounted for more than 95 percent of the total value of dairy imports during the year. In terms of whole milk equivalent, imports during 1955 amounted to 520 million pounds compared to 502 million pounds received in 1954.

(The table of contents appears on the back page.)



Background of Dairy Products Trade

Foreign trade in dairy products by the United States has historically amounted to only a small part of the domestic production, ordinarily less than 1 percent, on an equivalent basis, of the annual production of milk. Exceptions to this pattern are found in the two war periods during and following World War 1 and World War 11 when large quantities of dairy products, particularly cheese and processed milks, were moved abroad. However, even at the peak of the war movements, which occurred in 1944, only 5.6 percent of the total domestic production went into export channels; and, in 1955, despite unprecedented donations of dairy products for overseas' needy, only 5.4 percent of the annual milk production was sent abroad, as shown in the table, "Whole Milk Equivalent of United States Trade in Milk and Dairy Products in Relation to Production, 1935-1955", on the following page.

During World War 11, with most of the normal channels of trade denied to commercial exporters, the bulk of the movement of United States exports was under Government programs such as Lend-Lease; in 1944, almost 97 percent of all exports, in terms of milk equivalent, was so moved. After the surrender of Japan, government shipments, including those by the United Nations Relief and Rehabilitation Administration, were the major part of all exports of dairy products through 1946. Government-sponsored shipments were resumed in some volume in 1950 under the various foreign economic aid programs of the United States and except for 1952, have accounted for a considerable part of total exports in terms of milk equivalent. Some of these shipments are not reported by Department of Commerce trade publications and a discussion of these will be made later.

From 1935, and previously, through 1939 imports in terms of whole milk exceeded exports. Imports decreased markedly in 1940 and it was not until 1950 that importations were close to the prewar level. In 1952 milk equivalent value of imports exceeded that of exports for the first year since 1939. However, dairy imports under import regulations have declined from the 1952 level.

Shipments to Territories

There is also a substantial out-movement of milk and dairy products from the continental United States to non-contiguous territories and possessions; the bulk of this trade is with Hawaii and Alaska. This movement is not, of course, considered as export trade and does not appear in the commercial export statistics; neither are government program shipments, including Section 416, shown as exports. Since it may be of interest, these shipments are shown in the accompanying table, "Shipments of Dairy Products to Territories and Possessions, 1940-1955", on the following page.

Shipments of Dairy Products to Territories and Possessions 1940-55 (Quantity)

Year	Butter	Cheese	Evaporated Milk	Condensed Milk	Fresh Milk & Cream	Malted Milk	Dried Whole Milk	Whole Milk Equivalent
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1940	7,740	4,252	29,082	526	534	920	800	270
1941	9,812	4,966	37,504	623	557	905	1,261	340
1942	5,204	4,363	17,745	1,108	388	864	1,410	202
1943	5,279	2,031	5,304	826	616	1,032	1,501	154
1944	5,207	2,653	4,761	633	842	1,850	2,621	168
1945	6,899	4,887	29,548	1,649	472	1,112	4,743	293
1946	5,005	5,108	63,870	4,306	658	785	9,424	372
1947	6,045	5,083	50,987	2,374	269	1,087	9,547	362
1948	2,236	4,468	29,188	758	153	420	11,786	245
1949	1,573	4,727	22,339	111	60	351	12,376	221
1950	1,702	3,791	21,245	110	50	322	13,530	221
1951	1,697	3,693	24,611	1/ 59	1/	1/ 105	11,612	212
1952	1,473	4,669	24,648	1/	1/	1/	13,873	229
1953	2,066	4,060	29,088	1/	1/	1/	14,706	255
1954	2,449	4,349	28,842	1/	1/	1/	14,946	255
1955 2/	3,353	4,496	36,434	1/	1/	1/	15,585	287

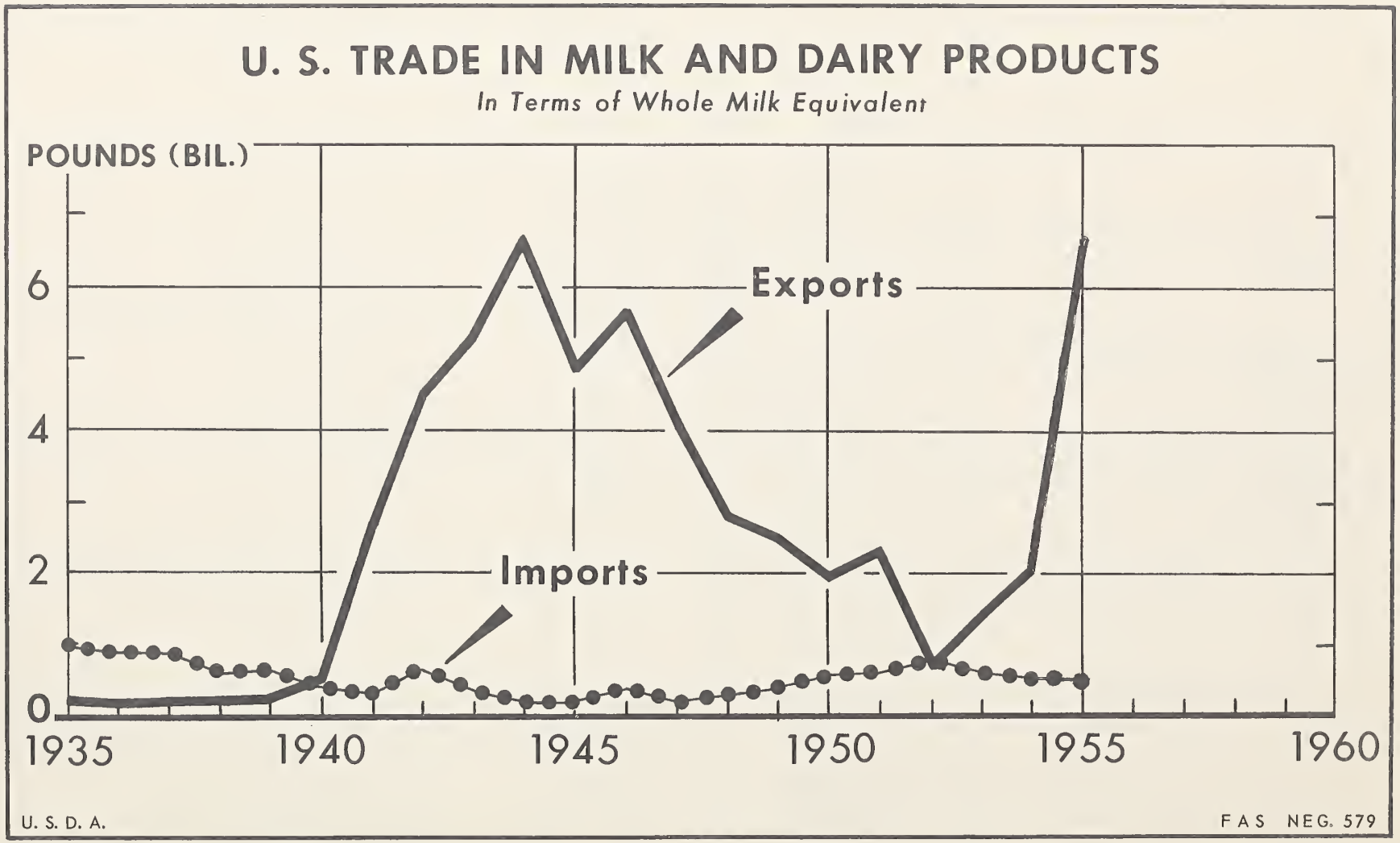
1/ Reporting discontinued after July 1951. 2/ Preliminary.
Source: Agricultural Marketing Service.

******

Whole Milk Equivalent of United States Trade in Milk Cream and Dairy Products in Relation to Production 1935-55

Year	Total Milk Production	Exports 1/	Percent of U. S. Production	Imports	Percent of U. S. Production	Export Balance
	Million pounds	Million pounds	Percent	Million pounds	Percent	Million pounds
1935	103,605	154	0.1	958	0.9	- 804
1936	104,710	115	0.1	829	0.8	- 714
1937	104,208	129	0.1	848	0.8	- 719
1938	108,107	156	0.1	572	0.5	- 416
1939	108,992	183	0.2	602	0.5	- 419
1940	111,512	472	0.4	344	0.3	+ 128
1941	117,088	2,652	2.3	276	0.2	+ 2,376
1942	120,433	4,476	3.7	635	0.5	+ 3,841
1943	118,517	5,233	4.4	303	0.3	+ 4,930
1944	118,123	6,645	5.6	127	0.1	+ 6,518
1945	120,628	4,876	4.0	169	0.1	+ 4,707
1946	118,697	5,691	4.8	344	0.3	+ 5,347
1947	118,114	4,050	3.4	167	0.1	+ 3,883
1948	113,671	2,750	2.4	235	0.2	+ 2,515
1949	117,003	2,458	2.1	315	0.3	+ 2,143
1950	117,302	1,988	1.7	548	0.5	+ 1,440
1951	115,181	2,265	2.0	579	0.5	+ 1,686
1952	115,071	676	0.6	787	0.7	- 111
1953	120,521	1,367	1.1	588	0.5	+ 779
1954	122,294	2,034	1.7	502	0.4	+ 1,532
1955 2/	123,544	6,678	5.4	520	0.4	+ 6,158

1/ From 1941 to 1955 includes export deliveries under government programs.
2/ Preliminary. Source: Agricultural Marketing Service.


U. S. TRADE IN MILK AND DAIRY PRODUCTS
In Terms of Whole Milk Equivalent
POUNDS (BIL.)
6
4
2
0
Exports
Imports
1935
1940
1945
1950
1955
1960
U. S. D. A.
FAS NEG. 579

United States Foreign Trade in Dairy Products

Reported exports and imports of principal dairy products, United States, 1920-1955

Year	Butter		Cheese		Condensed Milk		Evaporated Milk		Dried Whole Milk		Nonfat Dry Milk solids	
	Exports	Imports 1/	Exports	Imports 1/	Exports	Imports 1/	Exports	Imports 1/	Exports	Imports 2/	Exports	Imports 2/
	Mil.lbs.	Mil.lbs.	Mil.lbs.	Mil.lbs.	Mil.lbs.	Mil.lbs.	Mil.lbs.	Mil.lbs.	Mil.lbs.	Mil.lbs.	Mil.lbs.	Mil.lbs.
1920	17.5	37.5	16.3	16.0	277.1		133.9					
1921	8.0	18.6	11.8	26.9	93.9		195.8					
1922	10.9	7.0	5.0	46.6	56.8		130.7					
1923	5.8	23.7	8.3	64.4	57.4		136.9					
1924	8.3	19.4	4.3	59.2	64.0	4.7	142.3	1.7				
1925	5.3	7.2	9.2	62.4	42.7	4.0	105.1	.6				
1926	5.5	8.0	3.9	78.4	38.7	.3	75.8	1.3				
1927	4.3	8.5	3.4	79.8	35.0	.5	68.0	2.1				
1928	3.9	4.7	2.6	81.4	38.8	1.1	76.8	1.5				
1929	3.7	2.8	2.6	76.4	41.2	.6	68.9	2.0				
1930	3.0	2.5	2.0	68.3	29.6	1.4	60.8	.2				
1931	2.0	1.9	1.7	60.8	19.3	.6	55.8	.6				
1932	1.6	1.0	1.4	53.6	11.5	.7	39.3	.5	1.9	.6	1.7	3/
1933	1.2	1.0	1.3	49.5	4.7	1.0	32.4	.1	1.6	.4	.9	.1
1934	1.2	1.3	1.4	47.5	8.2	.3	38.0	3/	1.7	3/	1.4	3/
1935	1.0	22.7	1.2	48.9	4.9	.6	32.2	3/	1.6	2.5	1.2	.3
1936	.8	9.9	1.1	59.8	2.4	2.2	23.6	3/	1.8	4.2	1.9	20.0
1937	.8	11.1	1.2	60.6	8.0	1.5	22.9	.1	2.1	1.5	2.1	1.4
1938	2.0	1.6	1.5	54.4	5.4	.7	23.7	3/	3.8	.1	6.4	3/
1939	2.3	1.1	1.5	59.1	2.3	.2	27.5	3/	6.3	3/	2.1	.9
1940	2.9	1.4	2.3	32.6	27.4	3/	118.7	3/	7.5	3/	8.7	3/
1941	3.3	3.7	95.0	20.0	82.0	3/	602.0	3/	15.0	3/	36.0	3/
1942	15.2	20.1	308.0	24.2	15.0	3/	381.0	3/	14.0	3/	134.0	3/
1943	85.6	3.3	165.0	25.2	44.0	3/	568.0	3/	39.0	3/	232.0	3/
1944	87.6	1.7	295.0	9.0	52.0	3/	591.0	.1	47.0	3/	237.0	3/
1945	45.5	3.7	202.0	8.3	118.0	3/	759.0	4.6	65.0	3/	307.0	.1
1946	11.4	7.0	208.0	20.8	85.0	3/	956.0	.6	152.0	3/	230.0	3/
1947	11.2	3.8	177.4	8.7	108.2	3/	469.8	3/	101.7	3/	283.1	3/
1948	5.8	.2	95.6	23.6	110.1	3/	316.5	3/	100.5	3/	159.2	3.1
1949	4.2	.3	98.0	32.0	78.3	.1	249.5	3/	81.4	3/	214.5	5.3
1950	3.2	3/	47.5	56.2	27.9	3/	150.1	.4	62.6	3/	229.4	2.5
1951	7.1	.1	79.6	52.3	28.9	3/	203.4	3/	59.5	9.0	122.5	1.0
1952	.9	.5	3.8	49.2	29.6	3/	97.1	3/	42.3	37.4	58.7	.6
1953	.4	.1	5.9	56.2	20.0	3/	133.2	.5	46.1	5.9	98.1	.4
1954	3.3	1.0	5.4	50.0	1.4	3/	131.4	.1	42.4	3/	156.8	.7
1955 4/	22.5	0.7	22.9	51.9	8.0	4/	154.8	4/	45.9	4/	231.2	1.8

1/ General Imports, 1920-33, beginning 1934, imports for consumption. 2/ Imports for consumption. 3/ Less than 50,000 pounds. 4/ Preliminary. - Source: Foreign Commerce & Navigation of United States.

Exports of Dairy Products

The most important of the United States dairy products exports is the processed milk group. Exports of these products made up the bulk of the whole milk equivalent of reported exports, and constituted, as in 1954, almost 75 percent of the dollar value of the listed exports. The export value of nonfat dry milk solids is more than 21 percent of the total value of dairy products, but only a small amount of these exports is commercial; most of the reported nonfat dry milk solids exports represented shipments by the United Nations Childrens' Fund which purchased part of its supply from surplus government stocks at a nominal sum and received the remainder as a donation under Section 416.

Evaporated milk and, to only a slightly lesser extent, dry whole milk were able to meet most price competition in the world markets. This accounts, in part, for the fact that both products showed an increased export sale during 1955 over that of the previous year; some of the increased exports of evaporated milk are due to purchases through International Cooperation Administration programs, and 2.5 million pounds went to Greece under the initial shipments under Title I of Public Law 480. The increase in condensed milk exports of 6.6 million pounds is due in large part to ICA purchases, although a small reduction in price from 1954 also contributed to heavier movement. However, despite the increased takings of condensed milk, the United States has not made any appreciable recovery of its former market, because most of the registered gains were taken by Vietnam, Laos, and Cambodia (Indochina) which had not recently been importers of United States products.

The increase in exports of butter from 3.3 million pounds in 1954 to 22.5 million pounds in 1955 was due to stepped-up government program sales, such as that of 13.8 million pounds to Israel and 1.7 million pounds to Italy, in part for school lunch operations, the initial movement of butter under Title I of PL 480 and increased sales of CCC butter for commercial export at approximately 18 cents below the domestic support level. Additional noncommercial sales of butter were made in direct negotiations with other governments, as was also the case in 1954, but there are not shown in trade data, since the butter was processed into butteroil which is recorded in the catchall category of "dairy products, not elsewhere specified." Approximately 11 million pounds of butter were sold and shipped.

Cheese exports also increased substantially, due in large measure to government programs; 16.5 million pounds of the 22.9 million reported in export were so shipped. Cheese was also offered at reduced prices for export sales, but only about one-eighth of the 6.4 million pounds exported commercially was purchased from CCC stocks at lowered prices.

Relief Exports

The Department of Commerce states in its General Explanation preface to its annual publication on exports: "The export statistics . . . include government as well as nongovernment shipments of merchandise to foreign countries." Government programed shipments, as well as those of international organizations such as UNRRA and UNICEF, which are considered government agencies are included with commercial exports. These shipments are indistinguishable from commercial sales except as they may be isolated by the government agencies involved.

In 1949, a new element was injected into the picture on exports of agricultural commodities. In that year, in enacting the Agricultural Act of 1949, Congress provided, in Section 416 of the Act, for the distribution of surplus agricultural commodities to needy persons abroad. Under the price support programs, the government was building up large stocks of agricultural commodities, some, like dairy products, of a perishable nature. Congress, considering there was a possibility of loss or waste of commodities owned by the government, provided that the commodities, if no domestic or export sales providing a financial return could be made, should be made available to school lunch and needy groups in the United States; after these domestic requirements were met any remaining supplies could be donated for the distribution to needy persons overseas. The commodities, according to the Act, were to be distributed through private welfare organizations of the United States having overseas facilities and which were approved for participation by an Advisory Committee on Voluntary Foreign Aid, a citizens' group established to coordinate private foreign-aid efforts with those carried out under the Mutual Security Act. In addition, the plans of the agencies for distribution abroad are approved by the U. S. Department of Agriculture and the International Cooperation Administration. In this manner, assurance was, and is, provided that donations will not interfere with regular commercial sales and that proposed programs of the voluntary agencies would not overlap and duplicate one another. Section 416 was amended through Title III of Public Law 480, the Agricultural Trade Development and Assistance Act of 1954, to allow UNICEF, which had previously been a purchaser of surplus commodities at nominal sums, to be eligible to receive and distribute commodities.

With the exception of UNICEF which, as stated before, has the status of a government agency and the exports of which are shown in commodity export listings, the exports of the voluntary agencies of donations under Section 416 are lumped in a miscellaneous category which includes all "commodities exported for relief or charity by individuals and private agencies." As a consequence, government trade statistics have not specified commodities shipped under Section 416 and which have not heretofore been treated in the discussion of foreign trade.

Relief shipments since 1950, the first year of operation under Section 416, have accounted for a considerable movement of butter, cheese, and nonfat dry milk, the three commodities used to support the manufacturing price of milk. Only in 1952, when surplus stocks of butter and cheese were low and relief shipments suspended, did commercial export sales of those three dairy items exceed other shipments.

When the U. S. Department of Agriculture announced in 1954 that it would offer its stocks of butter, cheese, and nonfat dry milk for commercial export at prices allowing it to compete in world markets, there was considerable alarm expressed by other dairy countries. As shown in the accompanying table on the following page, "United States Exports of Selected Dairy Products by Type of Shipment," the commercial export sales of the three commodities have been only a small part of total overseas shipments from the United States. In 1955, the first complete year of sales of CCC stocks at reduced prices for commercial export sales, only 3 percent of the butter, 4 percent of the cheese, and 7 percent of the nonfat dry milk shipped abroad were commercial sales.

UNITED STATES EXPORTS OF SELECTED DAIRY PRODUCTS BY TYPE OF SHIPMENT
1949-55 (000 pounds)

Commodity and Year	Exports Listed in Commerce Statistics				Exports not Reported by Commerce Statistics			Total Exports	Percent Commercial Exports of Total	Percent 416 Exports of Total
	Military Feeding (1)	Government Programs (2)	Commercial (3)	Total Commerce (4)	U.S.D.A. 416 (5)	Other Government Programs (6)	Total non Reported Exports (7)	(8)	(9)	(10)
Butter										
1949	—	—	4,174	4,174	—	—	—	4,174	100	0
1950	—	—	3,215	3,215	23,102	—	23,102	26,317	12	88
1951	—	5,473	1,654	7,127	14,816	—	14,816	21,943	8	68
1952	—	—	914	914	—	—	—	914	100	0
1953	—	—	362	362	24,192	—	24,192	24,554	1	99
1954	—	1,509	1,834	3,343	1/35,597	15,547	51,113	54,487	6	65
1955 2/	—	15,783	6,716	22,499	1/190,879	12,599	203,478	225,977	3	84
Cheese										
1949	—	—	98,021	98,021	—	—	—	98,021	100	0
1950	—	38,299	9,191	47,490	7,154	—	7,154	54,644	17	13
1951	—	36,475	43,165	79,640	1,320	—	1,320	80,960	53	1
1952	—	—	3,811	3,811	—	—	—	3,811	100	0
1953	466	2,319	3,127	5,912	14,157	—	14,157	20,069	16	71
1954	—	460	4,918	5,378	25,219	3,791	29,010	34,388	14	73
1955 2/	—	16,543	6,354	22,897	124,613	—	124,613	147,510	4	84
Non Fat Dry Milk										
1949	131,746	52,733	30,019	214,498	—	—	—	214,498	14	0
1950	1,027	209,295	19,128	229,450	62,556	3/39,102	101,658	331,108	6	18
1951	1,000	79,297	42,246	122,543	63,650	4/37,901	101,551	224,094	19	28
1952	506	20,604	37,618	58,728	—	798	798	59,526	63	0
1953	6,028	70,904	21,166	98,098	79,749	4,663	84,412	182,510	12	44
1954	86	148,367	6,833	155,286	78,680	13,680	92,360	247,646	3	32
1955 2/	—	193,501	37,848	237,165	270,581	5/59,545	330,126	561,475	7	48

1/ Including butter oil in terms of butter. 2/ Preliminary. 3/ Of which 38,644 for feed. 4/ Of which 37,236 for feed. 5/ Of which 53,729 for feed.

With the exception of 1952, when Section 416 shipments were suspended, commercial exports of butter have never exceeded 12 percent of total overseas shipments. And during the same 5-year period, with the exception of 1952, Section 416 donations have never been less than 65 percent of total butter shipments; and in 1953 they accounted for 99 percent of the total.

Overseas donations of cheese did not become important until 1953, but since that time they have accounted for more than 70 percent of total overseas shipments. In the case of nonfat dry milk, the donations under Section 416 have never accounted for more than 48 percent of total shipments. On the other hand, commercial shipments of nonfat dry milk, again with the exception of 1952, have never exceeded 19 percent of total exports. However, during these years, UNICEF purchased for nominal sums quantities of nonfat dry milk which it shipped abroad for its relief programs; these shipments appeared in the export commodity statistics and are the major part of the shipments shown in column 2 of the table. As stated previously, in 1955 UNICEF was permitted to receive commodities free-of-charge under Section 416 donations; if previous UNICEF shipments are considered with Section 416 shipments, such shipments would account for at least two-thirds of all nonfat dry milk exports except in 1952, when both Section 416 and UNICEF purchased shipments were negligible, and in 1951 when these shipments accounted for 44 percent of all exports.

Since, as mentioned above, Section 416 shipments have been listed in the miscellaneous category covering all shipments abroad, a commodity-by-commodity presentation of these shipments by country of designation has not been possible. In 1954, Title III of Public Law 480 amended the conditions under which donations could be made to permit the Commodity Credity Corporation to underwrite costs incident to packaging and inland transportation. Since the date of shipment, the port and the country of designation became, in part, the responsibility of the government, it was necessary to maintain records in the manner to show this information; this was first done for a complete year in 1955, and it is now possible to show exports of Section 416 dairy products by country of designation. This has been done for calendar year 1955 in the accompanying table on the following page, "Shipments of Dairy Products under Section 416 by Countries of Designation -- 1955."

Shipments of dairy products under Section 416[1/], by country of destination, 1955

Country of destination	Butter	Butteroil	Cheese	Nonfat dry milk solids
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
North America				
British Honduras				292
Costa Rica		30		
Honduras	315		339	712
Mexico	31	70	102	244
Panama	169		1,168	1,123
Bahamas	35		37	43
Haiti		120	274	681
Jamaica	154		189	
Martinique				100
Total North America	704	220	2,109	3,195
Europe				
Austria	4,366	1,567	4,995	2,909
Belgium	62		50	45
Finland	3,200			
France	2,610	448	1,461	1,685
Germany, Western	17,129	1,511	10,446	20,707
Greece	12,945	703	23,643	14,341
Italy	29,422	30	29,870	34,166
Malta	100		848	113
Spain	10,016		12,404	41,683
Trieste	400		961	904
United Kingdom	32		36	33
Yugoslavia	15,682	711	1,958	10,782
Total Europe	95,964	4,970	86,672	127,368
Asia				
Iran	30	664	110	1,037
Israel	535		313	272
Jordan	796		1,238	111
Lebanon			170	225
Turkey	129		47	542
Hong Kong	453	178	8	3,157
India	435	32,808	1,045	36,633
Indochina	150	3,576	1,492	5,230
Indonesia				254
Japan	1,500	30	492	4,209
Korea	140	3,502	336	10,026
Malaya		298		1,108
Okinawa (Ryukyus Islands)				1,185
Pakistan	62	3,982	750	11,831
Philippine Islands				65
Portuguese India		299		300
Taiwan (Formosa)	150	3,534	60	9,108
Total Asia	4,380	48,871	6,061	85,293
South America				
Bolivia	1,292	100	2,185	2,056
Brazil	442		710	4,499
British Guiana			30	
Colombia			579	2,856
Ecuador	30		30	50
Peru	102		84	748
Total South America	1,866	100	3,618	10,209
Africa				
Kenya				100
Egypt	59	14,745	24,977	39,575
Eritrea	30			
French Morocco	82		161	220
Nigeria				87
Tunisia	87		150	230
Total Africa	258	14,745	25,288	40,212
Not specified		1,260	865	4,304
TOTAL WORLD	103,172	70,166	124,613	270,581

1/ Section 416 of the Agricultural Act of 1949.

Compiled from shipping records by the Foreign Agricultural Service, USDA.

Import Controls of Dairy Products Trade

Of primary importance in the importation of dairy products by the United States is the fact of import controls. Imports of butter and various other dairy products have been subject to import licensing controls since early in World War 11. In 1942, with ocean shipping facilities extremely limited in view of requirements, a series of executive orders were executed designed to limit imports to strategic materials including food. Concurrently with the imposition of these controls on public agencies, a general import order, M-63, was issued to control food imports for private accounts. While the order was issued by the War Production Board, the Food Distribution Administration of the Department of Agriculture acted as administrator. In late 1944, with the stockpile of critical war materials no longer a problem, the complete responsibility for food import controls was turned over to the War Food Administration of the Department of Agriculture; General Imports Order M-63 was replaced by War Food Order Number 63.

After the war, controls were gradually relaxed on all dairy products except butter. Authority for the continuation of import controls on butter was provided for under the first Defense Production Act (effective July 1, 1950). When the Defense Production Act of 1950 was extended in 1951, Section 104 was included providing that no dairy product should be imported which the Secretary of Agriculture determined would:

(a) impair or reduce domestic production;
(b) interfere with orderly domestic storing and marketing; or
(c) result in an unnecessary burden or expenditure under any Government price support program.

On August 9, 1951, the importation of butter was again embargoed; also embargoed was nonfat dry milk solids. All cheese imports were subject to quantitative quotas based on average annual imports during 1948-1950 and casein imports were given quantitative quotas based on imports during 1950-1951.

In 1952, the Defense Production Act was again extended. Section 104 was continued with two additional features; they were:

(a) the Secretary must now determine the necessity for controls for each type or variety of product;
(b) import quotas may be increased by 15 percent in the interest of international trade and relationships.

The principal effect of the change concerning determination of imports by types or varieties concerned cheese. On July 1952, import controls were terminated on Pecorino and Roquefort, variety cheeses made from sheep's milk, Swiss cheese, Gruyere process cheese, Bryndza, Goya and most miscellaneous varieties of this type, and Stilton, a blue-mold cheese. Import controls were also lifted on casein. On April 1, 1953, dried whole milk, dried cream and dried buttermilk were added to the list of embargoed items under Defense Food Order 3, the instrument controlling imports under the Defense Production Act authority.

The Defense Production Act expired on June 30, 1953. Previous to its expiration, the President, acting under authority granted under Section 22 of the Agricultural Adjustment Act, as amended, caused an investigation to be made by the Tariff Commission of the effects of unrestricted imports of dairy products on the Government's price support programs. On the basis of the Tariff Commission's report there was issued a Presidential Proclamation restricting imports of dairy products. Import regulation 1 was put into effect by the Department of Agriculture under authority of the Presidential Proclamation. The commodities and quotas established under Import Regulation 1 is shown in the following table along with the status of controls under Section 104.

Status of Imports of Dairy Products Under Section 22

Commodity	Import status prior to July 1, 1953 under Section 104	Quota status under section 22	Import authorization July 1, 1955 through June 30, 1956
		Pounds	Pounds
Butter	Embargoed	707,000	707,000
Malted milk	High fat contents embargoed	6,000	6,000
Nonfat dry milk	Embargoed-Aug. 9, 1951	1,807,000	1,807,000
Italian cows milk cheese	Annual Quota 1/ 9,200,000 lbs.	9,200,100	9,200,000
Cheddar	Annual Quota 1/ 9,775,000 lbs.	2,780,100 2/	2,780,100
Edam and Gouda	Annual Quota 1/ 4,600,000 lbs.	4,600,200	4,600,200
Blue Mold	Annual Quota 1/ 3,450,000 lbs.	4,167,000 3/	4,167,000 3/
Dry Whole Milk	Embargoed April 1, 1953	7,000	7,000
Dry Buttermilk	Embargoed April 1, 1953	496,000	496,000
Casein	Controls terminated Dec. 30, 1952	Not Controlled	Not Controlled
Dried Cream	Embargoed April 1, 1953	500	500

1/ Including 15% allowance in interest of international trade.
2/ Including processed Cheddar; processed Cheddar treated separately under Section 104, 3/ Including processed blue-mold; processed blue-mold treated separately under Section 104.

Imports of Dairy Products

For the third consecutive year, more than 95 percent of the total value of dairy imports was in the form of cheese and casein; the total value of dairy products imported in 1955 of $41.1 million dollars more than 65 percent was represented by the value of cheese while 33 percent of the total was casein. Imports of other dairy products, most of which are under import regulations, were small, both as to quantities and values.

Controls on casein were lifted in December 1952, and casein imports were up almost one-third in the following year. In 1954 they were just slightly over the 1952 level, but in 1955 they were again at the level reached in 1953. The unit value of casein imports was somewhat higher than in previous years and the total value of casein imports in 1955 is almost 46 percent higher than the same quantity imported in 1953.

Since the quota year for cheese is on a fiscal year basis and the imports are reported on a calendar year basis there may be some differences between quota allowances and import figures. However, imports of Italian cow's milk cheeses were only slightly higher than the previous year while Cheddar cheese imports were about 8 percent under 1954. Blue Mold cheese and the Edam and Gouda varieties showed slight increases over claendar 1954 imports. However, most of the increase of 2 million pounds in total cheese imports was accounted for by cheese types not under quota regulations.

Condenses and evaporated milk have never been import items of consequence. Receipts during 1955 again fell off and totaled only 8,000 pounds; the 6,000 pounds of condensed milk came from the Netherlands while the evaporated milk was imported from Canada.

The 1955 imports of dried whole milk and dried buttermilk were under 1954 receipts and well under quotas. Nonfat dry milk imports were up from 0.7 million pounds in 1954 to 1.8 million pounds; however, the imports were within the limits permitted under import quotas. The imports of malted milk compounds at 6,000 pounds was double the 1954 figure, but was within the quota limit for the product.

Total Exports of Milk, Cream and Dairy Products
Average 1935-39, Annual 1951-55

Quantity

Item	Average 1935-39	1951	1952	1953	1954	1/ 1955
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Fresh milk and cream	550	4,395	4,814	3,790	1,920	2,073
Butter	1,370	7,127	914	362	3,343	22,499
All cheese	1,281	79,640	3,811	5,912	5,378	22,897
Cheddar, natural	n.a.	49,515	291	441	816	3,512
Other, natural	n.a.	1,171	983	812	1,214	1,794
Cheddar, processed	n.a.	26,740	1,363	3,707	2,239	12,415
Other, processed	n.a.	2,215	1,174	952	1,109	5,176
Processed milk						
Condensed, sweetened	4,586	28,870	29,553	19,978	1,412	8,012
Evaporated	25,971	203,352	97,095	133,245	131,418	154,800
Dried whole	3,116	59,496	42,537	46,064	42,421	45,891
Nonfat dry milk solids	2,735	122,543	58,728	98,097	156,813	231,349
Processed milk products						
Infants' and Dietetics' chiefly milk base	2/	11,103	9,261	11,382	10,269	13,715
Malted milk compounds and mixture	2/	7,310	5,022	3,332	3,322	4,280
Ice cream powder mixes	2/	1,354	1,435	1,106	1,044	730
Casein (inedible)	n.a.	211	167	206	140	127
Dairy products, N.E.S.	3,202	2,069	5,130	7,488	14,113	20,506

1/ Preliminary. 2/ Included with Dairy Products, not elsewhere specified.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

Total Exports of milk, cream and dairy products
Average 1935-39, Annual 1951-55 (Continued)

Value

Product	Average 1935-39	1951	1952	1953	1954	1/ 1955
	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Fresh Milk and Cream	49	640	808	785	537	566
Butter	407	2,245	750	287	1,797	10,151
All Cheese	285	25,333	1,962	2,639	2,261	8,452
Cheddar, natural	n.a.	14,264	135	196	284	943
Other, natural	n.a.	543	535	401	493	740
Cheddar, processed	n.a.	9,473	694	1,533	920	5,157
Other, processed	n.a.	1,053	598	509	564	1,612
Processed Milk						
Condensed, sweetened	549	6,506	6,827	4,512	363	1,943
Evaporated	1,800	29,016	15,851	20,351	19,431	22,963
Dried Whole	1,098	34,039	23,063	24,778	21,772	23,232
Nonfat dry milk solids	184	10,571	10,006	13,695	19,059	24,051
Processed Milk Products						
Infants' and Dietetics' chiefly milk base	2/	7,725	6,636	7,728	6,713	8,816
Malted milk compounds and mixtures	2/	3,123	2,055	1,413	1,530	2,064
Ice cream powder mixes	2/	614	625	536	445	325
Casein (inedible)	n.a.	94	57	114	85	64
Dairy Products, N.E.S.	1,029	485	3,937	5,621	7,335	11,058
Total Value	5,401	120,391	72,577	82,459	81,328	113,685

1/ Preliminary. 2/ Included with Dairy Products, not elsewhere specified.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

Total Imports of Milk, Cream and Dairy Products
Average 1935-39, Annual 1951-55

Quantity

Item	Average 1935-39	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Cream	323	12	2	2	-	-
Whole Milk	26	23	2/	2	391	43
Skimmed Milk & Buttermilk	216	33	2	2/	-	-
Condensed, sweetened	398	2/	2/	4	8	6
Evaporated	37	2	2	467	52	2
Condensed, n.e.s.	637	-	10	-	-	-
Whole Milk, dried	1,652	9,046	37,012	5,866	9	6
Cream, dried	-	4	226	134	-	-
Skimmed Milk, dried	450	1,031	569	435	710	1,848
Buttermilk, dried	319	1,610	12,551	1,146	743	249
Malted Milk & Compounds, dried	14	408	5,209	7	3	6
Butter	9,278	59	458	126	962	742
Cheese - all	56,587	52,335	49,207	56,215	49,958	51,951
Swiss	8,668	7,135	7,322	8,656	8,422	8,641
Gruyere	2,311	2,331	3,056	3,215	3,085	3,585
Romano	)	2,342	1,401	2,226	1,542	1,366
Pecorino 3/	) 15,644	9,525	12,715	12,313	13,317	13,242
Reggiano	)	864	955	2,056	1,611	1,256
Parmesan	) 2,160	76	120	297	251	395
Provoloni	)	2,505	4,026	3,735	3,605	(4,075
Provolette	) 5,094	61	73	46	31	(
Roquefort	2,383	1,688	1,815	1,806	1,879	1,630
Cheddar	4,748	12,072	6,525	7,810	2,814	2,577
Blue Mold	2,424	5,049	3,022	3,331	3,304	3,984
Edam & Gouda	3,326	4,333	3,585	4,560	4,732	4,915
Bryndza	-	2	-	-	3	23
Sbrinz	-	769	385	273	82	37
All other cheese including processed not listed above	9,829	3,583	4,209	5,891	5,280	6,225
Casein, dried	8,180	43,386	56,838	74,246	59,833	74,480
Lactose, dried	-	1,592	2,968	2,274	2,484	1,960

1/ Preliminary. 2/ Under 500 pounds. 3/ Pecorino cheese, sheep's milk cheese, including small amounts not suitable for grating.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

Total Imports of Milk, Cream and Dairy Products
Average 1935-39, Annual 1951-55
(continued)

Item	Value					
	Average 1935-39	1951	1952	1953	1954	1955
	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Cream	56	4	1	1	1	-
Whole milk	1	2	2/	2/	46	4
Skimmed milk & Buttermilk	5	3	2/	2/	2	-
Condensed (sweetened)	27	2/	2/	1	1	1
Evaporated	3	1	2/	71	8	1
Condensed, n.e.s.	28	-	1	-	-	-
Whole milk, dried	141	2,245	9,477	1,148	2	1
Cream, dried	-	2	103	68	-	-
Skim milk, dried	175	78	77	39	64	153
Buttermilk, dried	23	147	1,476	137	66	25
Malted milk & Compounds, dried	5	171	2,250	3	3	3
Butter	1,759	34	271	60	450	413
Cheese - all	12,222	22,408	23,169	27,451	25,434	26,902
Swiss	2,656	4,162	4,143	5,145	4,977	5,112
Gruyere	n.a.	1,496	2,074	2,195	1,998	2,266
Romano	n.a.	788	544	737	515	542
Pecorino	n.a.	5,170	6,412	6,975	7,434	7,832
Reggiano	n.a.	363	443	824	672	589
Parmesan	n.a.	39	62	194	163	194
Provoloni	n.a.	1,183	1,919	2,004	1,886	(2,055
Provolette	n.a.	29	34	24	16	(
Roquefort	n.a.	1,089	1,205	1,266	1,404	1,277
Cheddar	n.a.	3,266	2,107	2,365	756	697
Blue mold	n.a.	1,748	1,257	1,514	1,462	1,649
Edam & Gouda	n.a.	1,520	1,329	1,811	1,909	1,995
Bryndza	n.a.	2/	-	-	1	6
Sbrinz	n.a.	249	150	98	29	15
All other cheese, including processed not listed above	5,990	1,306	1,490	2,299	4/ 2,212	4/ 2,673
Casein, dried	623	13,604	8,535	9,286	10,146	13,557
Lactose, dried	2/	229	435	326	371	314
Total Value 3/	15,068	38,699	45,360	38,265	36,223	41,060

1/ Preliminary. 2/ Less than $500. 3/ Value of lactrose not included in total value of dairy products. 4/ Includes less than $50,000 for total of "informal" entries of above cheeses not included in specific category.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

Imports by Country of Origin
Average 1935-39, Annual 1951-55

Product and Country	Average 1935-39	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
BUTTER						
Canada 2/	41	2	457	1	-	1
Cuba	290	-	-	-	-	-
Denmark	476	56	-	-	299	246
Latvia	4/ 1,030	-	-	-	-	-
Lithuania	4/ 367	-	-	-	-	-
Netherlands	1,650	1	-	28	14	-
United Kingdom	892	-	-	-	-	-
Poland	6/ 142	-	-	-	-	-
U.S.S.R.(Europe & Asia)	6/ 536	-	-	-	-	-
Argentina	4/ 726	-	1	42	62	95
New Zealand	2,658	-	-	41	567	392
Australia	5/	-	-	-	7	8
Others	470	-	-	14	13	-
Total	9,278	59	458	126	962	742

1/ Preliminary. 2/ Includes Newfoundland and Labrador. 3/ Less than 500 pounds. 4/ Average 1935-38. 5/ If any under "Others". 6/ Average 1935-37.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

Imports by Country of Origin
Average 1935-39, Annual 1951-55
(Continued)

Product and Country	Average 1935-39	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
CHEESE:						
All Cheese						
Canada 2/	5,050	2,783	1,539	1,068	489	697
Mexico	3/	8	5	2	6	-
Austria	3/	5	-	36	250	195
Belgium	3/	18	3	10	6	1
Denmark	3,764	5,752	4,155	4,641	4,516	5,466
Finland	1,333	84	561	500	791	806
France	2,980	1,875	1,877	1,877	1,933	1,718
Germany, Western	193	55	181	320	179	360
Greece	1,307	14	10	83	82	303
Ireland	3/	41	-	1	2	1
Italy	25,993	14,994	20,203	20,039	20,516	21,328
Malta and Gozo	3/	32	30	17	20	21
Netherlands	3,946	3,869	3,384	4,200	4,326	4,594
Norway	780	556	631	769	709	742
Portugal	3/	26	26	33	30	43
Sweden	3/	114	93	81	106	137
Switzerland	7,946	8,813	8,939	10,775	10,260	10,704
Turkey	3/	18	19	7	7	-
United Kingdom	3/	29	36	23	23	18
Yugoslavia	3/	-	88	213	197	299
Bulgaria	3/	62	-	42	48	-
Czechoslavakia	3/	-	-	-	3	23
Argentina	1,516	3,666	2,359	4,635	3,062	2,400
Brazil	3/	-	-	-	51	-
Australia	3/	-	-	63	-	-
New Zealand	3	9,513	5,065	6,775	2,327	2,035
Others	1,776	8	3	5	19	60
Total	56,587	52,335	49,207	56,215	49,958	51,951

1/ Preliminary. 2/ Includes Newfoundland and Labrador. 3/ If any, under "Others".

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

Imports by Country of Origin
Annual 1951-55
(Continued)

Product and Country	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
CHEESE-continued					
Cheddar					
Canada 2/	2,538	1,452	955	482	526
Denmark	5	3	-	-	11
Ireland	14	-	-	-	-
Sweden	6	4	16	5	5
Australia	-	-	63	-	-
New Zealand	9,504	5,065	6,775	2,327	2,035
Others	5	1	1	-	-
Total	12,072	6,525	7,810	2,814	2,577
Swiss 3/					
Canada 2/	4	1	30	-	-
Austria	5	-	36	237	195
Denmark	379	723	500	290	320
Finland	84	530	445	761	792
France	62	4/	12	-	5
Germany, Western	34	143	208	37	62
Ireland	27	-	1	1	-
Italy	3	31	2	22	48
Netherlands	86	64	31	23	181
Norway	-	20	55	-	-
Sweden	1	1	5	-	60
Switzerland	8,763	8,861	10,543	10,123	10,551
Others	18	3	4	12	12
Total	9,466	10,377	11,872	11,506	12,226
Romano					
Italy	197	-	-	-	7
Argentina	2,144	1,401	2,226	1,542	1,359
Total	2,341	1,401	2,226	1,542	1,366

NOTES: At end of final sheet of cheese by type.

Imports by Country of Origin
Annual 1951-55
(Continued)

Product and Country	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
CHEESE-continued					
Percorino					
Denmark	2	-	29	-	1
Italy	9,452	12,630	12,125	13,180	12,804
Argentina	70	82	144	78	230
Others	1	3	15	59	5/ 207
Total	9,525	12,715	12,313	13,317	13,242
Reggiano					
Italy	352	588	357	322	631
Argentina	512	367	1,699	1,256	625
Others	-	-	-	33	-
Total	864	955	2,056	1,611	1,256
Parmesan					
Italy	75	120	297	251	395
Other	1	-	-	-	-
Total	76	120	297	251	395
Provolone					
Italy	2,556	4,098	3,775	3,634	4,035
Argentina	10	1	6	2	-
Others	-	-	-	-	6/ 40
Total	2,566	4,099	3,781	3,636	4,075
Roquefort					
France	1,688	1,815	1,806	1,875	1,630
Others	-	-	-	4	-
Total	1,688	1,815	1,806	1,879	1,630

NOTES: At end of final sheet of cheese by type.

Imports by Country of Origin
Annual 1951-55
(Continued)

Product and Country	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
CHEESE - continued					
Blue Mold					
Denmark	4,757	2,792	3,136	3,130	3,761
France	80	18	11	11	8
Italy	138	146	125	104	103
Norway	4/	-	-	-	25
Sweden	45	25	9	39	25
Switzerland	13	5	-	4	25
United Kingdom	13	17	11	16	10
Others	2	19	39	-	27
Total	5,048	3,022	3,331	3,304	3,984
Edam and Gouda					
Canada 2/	41	10	-	-	-
Belgium	3	3	3	-	-
Denmark	207	92	157	251	357
Finland	-	-	8	11	-
Netherlands	3,752	3,206	4,035	4,161	4,255
Norway	172	214	221	196	151
Portugal	10	12	4	3	5
Sweden	1	1	1	4	-
Switzerland	-	6	5	5	2
Argentina	145	41	126	101	142
Others	2	-	-	-	3
Total	4,333	3,585	4,560	4,732	4,915
Sbrinz					
Italy	8	2	-	-	-
Switzerland	4/	-	-	-	-
Argentina	755	383	273	82	37
Uruguay	6	-	-	-	-
Total	769	385	273	82	37

NOTES: At end of final sheet of cheese by type.

Imports by Country of Origin
Annual 1951-55
(Continued)

Product and Country	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
CHEESE - continued					
Other					
Canada 2/	200	75	84	7	129
Mexico	8	4	2	6	-
Dominican Republic	-	-	4	-	-
Belgium and Luxembourg	1	1	5	6	1
Bulgaria	62	-	42	45	-
Denmark	401	545	819	845	1,015
Finland	-	31	46	19	14
France	45	45	48	47	68
Germany, Western	21	19	74	147	284
Greece	14	10	69	64	257
Italy	2,209	2,588	3,357	3,002	3,299
Malta	32	27	15	18	19
Netherlands	31	114	133	141	144
Norway	384	397	493	513	566
Portugal	16	14	29	22	38
Sweden	61	61	50	59	47
Switzerland	30	66	228	128	126
Turkey	17	19	7	7	-
United Kingdom	14	19	11	7	8
Yugoslavia	-	88	213	180	182
Argentina	23	82	161	-	7
New Zealand	9	-	-	-	-
Others	2	3	1	19	7/ 39
Total	3,580	4,208	5,891	5,282	6,243

1/ Preliminary. 2/ Includes Newfoundland and Labrador. 3/ Includes Ementhaler with eye-formation and Gruyere process cheese. 4/ Less than 500 pounds. 5/ Of which, 118,000 pounds from Yugoslavia, 46,000 pounds from Greece and 32,000 pounds from Spain. 6/ From Canada. 7/ Of which, 27,000 pounds from Czechoslovakia.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

Imports by Country of Origin
Average 1935-39, Annual 1951-55
(Continued)

Product and Country	Average 1935-39	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
PROCESSED MILK						
Dried Whole						
Canada 2/	3/ 1	229	1,482	107	-	-
Denmark	-	774	2,358	221	-	-
Netherlands	3/ 22	5,075	10,692	156	4	-
Sweden	-	-	9,358	545	-	-
Australia	-	2,067	38	-	-	-
New Zealand	3/4/	901	12,816	4,837	5	6
Others	5	-	267	-	-	-
Total	3/ 28	9,046	37,011	5,866	9	6
Dried Skimmed						
Canada 2/	3/ 22	50	569	435	484	378
Netherlands	3/ 412	67	-	-	-	-
Australia	-	711	-	-	226	1,470
New Zealand	4/	203	-	-	-	-
Total	434	1,031	569	435	710	1,848
Dried Buttermilk						
Canada 2/	5/1,547	273	11,387	1,142	318	168
Netherlands	5/ 40	-	253	4	-	-
New Zealand	-	1,337	911	-	425	81
Total	1,587	1,610	12,551	1,146	743	249
Dried Cream						
Canada 2/	-	2	-	-	-	-
Denmark	-	-	147	134	-	-
Germany, Western	-	-	9	-	-	-
Netherlands	-	2	1	-	-	-
Sweden	-	-	11	-	-	-
Australia	-	-	24	-	-	-
New Zealand	-	-	34	-	-	-
Total	-	4	226	134	-	-

1/ Preliminary. 2/ Includes Newfoundland and Labrador. 3/ Average for 1938-1939. 4/ Less than 500 pounds. 5/ For 1939.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

Imports of Country of Origin
Average 1935-39, Annual 1951-55
(Continued)

Product and Country	Average 1935-39	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
CASEIN						
Canada 2/	21	1,393	829	2,780	3,901	2,824
Azores	3/	251	342	198	120	69
Belgium	3/	2	103	-	-	-
Denmark	3/	3,136	3,633	708	114	-
France	2,380	6,281	3,183	960	3,564	797
Germany, Western	4/	742	640	-	22	-
Netherlands	142	2,323	1,592	1,257	606	770
Norway	3/	22	899	983	460	665
Portugal	-	240	-	84	96	-
Sweden	3/	99	781	-	-	4
Switzerland	-	109	234	33	-	-
United Kingdom	43	-	162	21	-	-
Argentina	5,076	24,427	34,129	54,683	41,249	56,243
Brazil	3/	20	-	383	925	219
Uruguay	-	1,229	1,617	1,662	1,695	875
Australia	5/ 336	2,128	530	1,050	1,460	4,413
New Zealand	97	983	8,077	9,444	5,591	7,563
Others	85	1	87	-	-	38
Total	8,180	43,386	56,838	74,246	59,803	74,480

1/ Preliminary. 2/ Includes Newfoundland and Labrador. 3/ If any, under "Others". 4/ Not available. 5/ For 1937.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

CANNED MILK: United States Exports by Country of Destination, Average 1935-39, Annual 1951-55

Country	Evaporated Milk						Condensed Milk					
	Average 1935-39	1951	1952	1953	1954	1955 1/	Average 1935-39	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Canada 2/	749	6	969	5	20	24	31	5	15	-	3	-
Costa Rica	169	742	610	442	298	295	161	9	-	-	-	-
El Salvador	8	35	24	2	11	-	1	1	-	-	-	-
Guatemala	37	105	25	2	-	23	52	6	1	-	-	-
Honduras	116	149	138	111	154	183	197	27	3	1	-	61
Mexico	1,152	6,343	7,506	9,383	10,513	12,208	16	31	388	16	-	-
Nicaragua	88	363	327	389	364	306	25	13	2	1	-	4
Panama Republic	3,824	438	362	56	40	296	174	683	7	4	-	-
Panama Canal Zone	3/	3,699	3,196	4,265	4,467	4,669	3/	431	44	71	52	9
Bahamas	4/	80	8	20	87	256	4/	-	-	22	-	-
Bermuda	153	20	10	4	13	54	3	2	-	-	-	-
Cuba	533	23,184	13,678	13,275	15,926	18,256	486	7,372	11,372	55	91	-
Dominican Republic	6	24	4	4	-	-	14	100	2	25	-	-
Haiti	92	444	89	202	62	103	55	33	-	5/	-	-
Jamaica	39	25	27	88	11	35	194	-	2	-	-	-
Netherlands Antilles	777	178	56	51	67	-	42	12	-	-	-	-
Trinidad and Tabago	7	4	7	5	-	35	5/	-	-	-	-	-
Belgium	5/	-	1	-	-	-	-	-	75	86	113	112
France	16	9	13	16	9	9	11	-	1	-	-	-
Germany, Western	6/	-	-	10,012	122	-	6/	-	-	-	-	-
Greece	7	30,146	13	6,823	-	5,607	51	2	-	-	-	-
Italy	6	1	1	3,491	-	-	3	-	-	-	-	-
Spain	-	-	-	914	-	-	-	-	-	-	-	-
Trieste	-	-	-	720	-	-	-	-	-	-	-	-
United Kingdom	496	38,977	-	-	1	-	1	5/	-	-	-	-
Arabian States	4/	334	87	79	52	84	4/	28	2	7	1	5
Israel	58	71	48	18	-	-	5/	15	1	5	-	-
Lebanon	-	7	5	72	-	-	-	3	-	-	-	40
Afghanistan	-	32	-	63	5	8	-	-	-	-	-	-
British Malaya	212	72	2	-	-	-	37	12,692	8	-	-	-
China	403	-	-	-	-	-	86	-	-	-	-	-
Hong Kong	488	140	5	13	-	-	62	-	-	-	-	-
India	120	2	1	5	-	-	-	8	45	-	2	-
Indonesia	935	5	-	-	-	-	4/	2,100	-	-	-	4
Japan	75	788	348	206	162	481	1	25	79	5	-	210
Philippine Republic	12,585	92,571	65,661	78,285	94,496	108,860	1,496	3,558	16,272	17,043	122	159
Taiwan	-	1,751	-	29	1,233	68	-	-	-	-	786	1,275
Thailand	1,076	149	-	-	-	4	5/	-	-	-	-	-
Bolivia	152	749	738	414	11	-	39	65	507	34	-	-
Brazil	10	13	1	-	23	5	31	8	5/	-	-	-
Chile	4	361	174	-	72	-	3	941	227	-	-	-
Colombia	193	297	78	86	156	142	61	13	2	14	-	-
Ecuador	23	95	231	224	9	51	3	11	-	-	-	-
Peru	719	222	1,875	2,855	2,066	1,723	12	122	11	12	-	-
Surinam	6	2	6	-	-	-	4/	-	4/	-	-	-
Uruguay	7	18	5	3	9	-	4/	4	-	-	-	-
Venezuela	276	446	586	475	514	603	221	499	406	554	236	36
Belgian Congo	5/	37	56	5	-	-	5/	34	-	-	-	-
French Equatorial Africa 7/	4/	12	22	17	21	21	4/	-	-	-	-	-
Liberia	4	94	18	-	43	4	5/	6	1	-	2	-
French Pacific Islands	4/	7	15	-	-	-	4/	1	63	-	-	-
U.S. Trust Territories	-	-	-	-	163	131	-	-	-	-	4	2
Others	350	105	69	116	218	8/ 256	9/ 1,017	10	17	24	-	10/ 6,095
Total	25,971	203,352	97,095	133,245	131,418	154,800	4,586	28,870	29,553	17,979	1,412	8,012

1/ Preliminary. 2/ Includes Newfoundland and Labrador. 3/ Included with Panama Republic. 4/ If any, under "others". 5/ Less than 500 pounds. 6/ Not available. 7/ Includes Cameroun. 8/ Of which, 168,000 pounds exported to Indochina. 9/ Of which, 961,000 pounds exported to Union of South Africa. 10/ Of which, 6,065,000 pounds exported to Indochina.

Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States, and official records of the Bureau of the Census.

DRIED MILK: United States Exports by Country of Destination, Average 1935-39, Annual 1951-55.

Country	Dried Whole Milk						Non-Fat Dry Milk Solids					
	Average 1935-39	1951	1952	1953	1954	1955 1/	Average 1935-39	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
British Honduras	1	43	2	62	-	27	2/	53	-	-	70	-
Canada 3/	12	5	14	161	126	175	344	713	263	91	3	5
Costa Rica	41	282	447	428	234	164	12	442	10	418	300	-
El Salvador	2	154	241	301	207	110	3	208	42	162	565	1,284
Guatemala	49	1,147	559	751	460	228	5	204	18	158	962	2,524
Honduras	62	271	297	324	364	419	2	395	196	266	734	194
Mexico	41	407	293	640	83	39	52	10,261	11,982	5,827	298	4,384
Nicaragua	18	90	53	56	73	88	2/	5	126	98	204	27
Panama Republic	226	872	795	682	936	246	104	524	421	342	408	666
Panama Canal Zone	116	701	582	699	682	552	25	191	134	186	126	252
Bahamas	-	10	15	17	10	42	-	7	18	38	54	232
Bermuda	1	2	3	-	3	-	2/	97	108	102	18	54
Cuba	26	45	34	16	20	43	120	2,900	1,962	399	38	36
Dominican Republic	10	224	218	230	157	170	2/	125	174	20	294	77
Haiti	8	80	73	64	40	13	2/	16	64	70	685	2,018
Jamaica	5	11	6	-	-	-	33	-	-	7	-	3,217
Leeward & Windward Islands	-	-	-	-	-	6	-	-	-	-	1,404	2,207
Netherlands Antilles	73	445	278	401	231	170	12	70	122	135	73	53
Trinidad & Tobago	2	78	-	-	9	3	1	-	-	-	893	-
Austria	-	-	-	-	-	-	-	104	29	-	-	60
Denmark	-	-	-	-	-	-	-	40	-	-	-	13,545
France	2/	1	-	-	2	-	13	-	-	-	-	834
Germany, Western	4/	-	1	-	-	-	4/	57	43	1,121	280	337
Greece	6	10	7	-	-	2	-	3,273	1,764	-	109	-
Italy	4	122	-	-	-	25	-	2,094	239	-	271	7,127
Trieste	-	-	-	-	-	-	-	2,433	-	-	-	-
United Kingdom	47	-	-	-	-	-	1,252	-	-	90	104	-
Yugoslavia	-	-	-	-	-	-	-	30,305	2,888	-	-	346
Arabian States	5/	66	83	-	41	17	-	1	4	42	39	61
Iran	2/	295	71	-	79	126	-	286	6	204	238	1,187
Iraq	5	39	45	61	85	97	2/	1	6	139	1,156	1,736
Israel	7	4	455	8	-	3	2	9,832	20,101	18,131	25,750	20,712
Lebanon	-	130	167	126	61	4	-	7,360	3,258	4,858	7,144	6,162
Syria	5	68	35	58	12	-	1	2	-	-	22	-
Afghanistan	-	30	2	-	-	-	-	-	-	-	225	-
British Malaya	73	81	2	-	57	-	1	101	-	-	109	1,331
Burma	2	1	-	-	-	-	-	429	-	-	995	1,028
Ceylon	2	2	-	-	-	-	2/	-	-	-	-	928
Hong Kong	19	221	111	203	37	66	64	1	63	139	427	259
India	8	28	15	22	33	48	12	3,565	1,043	6,050	10,788	18,003
Indochina	1	-	2/	-	2	13	-	-	-	-	516	608
Indonesia	24	116	53	53	65	-	2/	1,635	112	1,025	871	2,002
Japan	7	3,593	8	31	5	20	2	35,163	9,893	18,548	40,242	45,656
Korea	-	-	485	-	-	41	-	1,000	506	26,106	28,388	41,916
Pakistan	-	-	-	-	-	28	-	39	-	-	1,229	1,525
Philippine Republic	309	2,744	88	1,945	1,175	1,450	403	4,144	562	3,488	3,465	6,213
Taiwan	-	765	117	564	972	1,397	-	1,046	-	-	2	4,128
Thailand	20	98	48	63	58	42	2/	75	-	-	198	100
Nansei & Nanpo Islands	-	-	-	-	-	-	-	-	-	-	990	1,530
Bolivia	24	994	1,037	24	1	6	1	7	-	150	370	2,388
Brazil	66	2,535	769	291	1	497	1	1,544	1,251	3,392	4,842	13,455
British Guiana	2/	37	-	-	3	-	-	-	-	-	525	45
Chile	5	145	125	15	66	34	-	-	150	563	10,196	10,892
Colombia	251	1,682	202	591	2,865	1,719	7	62	44	-	1,898	3,312
Ecuador	23	370	406	686	145	274	2/	831	115	292	286	920
Paraguay	2/	-	2	-	-	30	-	-	-	199	191	1,095
Peru	42	121	356	385	281	293	22	356	544	415	739	5,278
Surinam	2/	2/	2	-	3	-	-	-	-	-	575	-
Uruguay	17	12	3	25	11	-	-	-	-	100	-	-
Venezuela	1,198	38,424	32,631	35,147	31,540	35,665	35	492	464	254	181	352
Angola	5/	301	71	-	27	-	5/	11	-	-	-	-
Belgian Congo	56	1,247	868	548	1,072	1,343	2	7	-	-	342	-
British East Africa	-	-	-	-	2	-	-	-	-	-	817	36
Egypt	4	2/	1	-	1	-	2/	-	-	997	2,429	1,026
Ethiopia	-	12	19	-	5	-	-	-	-	-	6	40
Liberia	5	29	61	77	37	26	2/	8	-	-	-	-
Mozambique	16	12	4	-	9	11	3	-	-	-	-	-
Nigeria & Cameroons	14	5	1	-	-	-	2/	-	-	-	-	101
Rhodesia & Nyasaland	-	160	-	-	-	1	-	-	-	-	20	36
Others	163	129	58	315	33	118	201	28	3	3,476	1,182	3,625
Total	3,116	59,496	42,319	46,070	42,421	45,891	2,735	122,543	58,728	98,098	155,286	237,165

1/ Preliminary. 2/ Less than 500 pounds. 3/ Includes Newfoundland and Labrador. 4/ Not available. 5/ If any under "others".

Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States, and official records of the Bureau of the Census.

BUTTER: United States Exports
By Country of Destination
Average 1935-39, Annual 1951-55

Country	Average 1935-39	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Canada 2/	10	3/	3/	3/	4/	10
El Salvador	3/	18	3/	-	24	75
Guatemala	26	14	4	1	4/	11
Honduras	33	26	11	20	7	40
Mexico	145	47	38	51	54	30
Nicaragua	8	1	1	-	3	86
Panama Republic	572	23	6	9	32	22
Panama Canal Zone	5/	1	1	1	257	503
Bahamas	-	37	13	18	25	29
Cuba	3	906	494	49	46	1,079
Curacao, NWI	119	28	2	8	7	6
Haiti	68	48	32	36	52	106
Italy	-	5,198	-	-	-	1,749
Yugoslavia	-	-	-	-	1,463	257
Arabian States	4/	21	21	23	19	22
Israel	-	21	1	-	-	15,963
Hong Kong	-	-	-	-	29	30
Japan	3/	26	8	3	2	6
Philippine Republic	150	114	47	36	363	473
Brazil	3/	5	-	3	10	17
Colombia	46	20	13	13	2	12
Peru	12	3/	3/	2	638	648
Venezuela	55	533	192	60	168	480
Liberia	3/	9	13	18	3	5
Others	123	31	17	11	6/ 139	7/ 840
Total	1,370	7,127	914	362	3,343	22,499

1/ Preliminary. 2/ Includes Newfoundland and Labrador. 3/ Less than 500 pounds. 4/ If any, under "Others". 5/ Included with Republic of Panama. 6/ Includes shipments under the Danube Flood Relief Program of 110,000 pounds. 7/ Includes shipments of 661,000 pounds to Portugal, 48,000 pounds to Finland, 36,000 pounds to Austria, 29,000 pounds to Taiwan, and 29,000 pounds to Egypt.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

ALL CHEESE: United States Exports
By Country of Destination
Average 1935-39, Annual 1951-55

Country	Average 1935-39	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
British Honduras	2	1	-	-	3	16
Canada 2/	64	784	437	331	514	371
Costa Rica	5	7	6	12	3/	12
El Salvador	5	28	37	28	79	67
Guatemala	38	35	30	36	15	57
Honduras	9	2	-	5	11	3
Mexico	125	390	430	548	730	664
Nicaragua	7	3/	-	3/	2	7
Panama	515	390	495	468	444	522
Panama Canal Zone	4/	322	296	344	326	441
Bahamas	-	52	36	56	50	76
Bermuda	20	4	-	43	31	28
Cuba	72	355	639	387	477	576
Curacao, NWI	35	90	80	65	55	56
Dominican Republic	7	14	12	11	12	31
Haiti	30	112	73	69	121	94
Jamaica	11	1	-	2	11	17
Austria	-	-	-	830	52	60
Belgium	1	114	-	88	283	608
France	3/	-	-	3/	48	34
Germany, Western	5/	-	-	1	120	183
Greece	1	5,846	-	-	240	-
Italy	3/	12	-	-	274	9,487
United Kingdom	2	67,922	4	11	55	460
Yugoslavia	-	1,981	-	-	-	11
Bolivia	1	5	17	1	-	21
Colombia	18	8	-	1	13	20
Peru	12	14	9	30	20	35
Venezuela	60	739	787	904	978	1,120
Arabian States	6/	100	95	138	70	70
Hong Kong	11	3	-	5	8	11
Israel	1	5	-	17	-	6,764
Japan	3	151	100	67	82	62
Lebanon	6/	2	-	7	5	7
Philippine Republic	139	69	124	58	84	142
Belgian Congo	3/	30	10	8	23	6
Egypt	3/	-	-	-	-	26
Liberia	3/	9	19	12	3	6
Others	87	43	75	7/1,329	139	726
Total	1,281	79,640	3,811	5,912	5,378	22,897

1/ Preliminary. 2/ Includes Newfoundland and Labrador. 3/ Less than 500 pounds. 4/ Included with Republic of Panama. 5/ Not available. 6/ If any, under "Others". 7/ Of which 990,000 pounds exported to Spain.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

CHEDDAR CHEESE (NATURAL):
United States Exports by Country of Destination
Annual 1951-55

Country	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Canada 2/	19	14	27	8	43
Guatemala	5	5	6	5	4
Mexico	39	19	23	19	96
Panama Republic	29	23	25	33	28
Panama Canal Zone	52	81	76	96	136
Cuba	13	4	29	12	12
Belgium	102	-	88	264	381
France	-	-	-	48	-
Greece	2,853	-	-	24	-
Italy	9	-	-	9	-
United Kingdom	46,271	1	5	46	446
Venezuela	88	106	126	142	136
Israel	-	-	3/	-	2,137
Japan	13	2	3/	3	6
Arabian States	-	6	4	-	19
French Morocco	-	-	-	50	1
Tunisia	-	-	-	20	-
Others	22	30	32	37	67
Total	49,515	291	441	816	3,512

1/ Preliminary. 2/ Includes Newfoundland and Labrador.
3/ Less than 500 pounds.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

PROCESSED CHEDDAR CHEESE
United States Exports by Country of Destination
Annual 1951-55

Country	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Canada	93	39	35	7	54
Costa Rica	6	5	11	-	12
El Salvador	25	27	16	54	50
Guatemala	23	19	18	7	50
Mexico	190	238	304	313	167
Panama	160	250	329	255	332
Panama Canal Zone	177	143	164	96	139
Bahamas	17	15	23	19	19
Cuba	62	106	76	233	108
Curacao NWI	27	28	31	24	32
Dominican Republic	-	-	6	6	23
Haiti	80	50	49	98	42
Austria	-	-	830	-	60
Belgium	11	-	-	-	183
Germany, Western	-	-	1	120	183
Greece	2,993	-	-	216	-
Italy	-	-	-	255	7,464
United Kingdom	20,520	3	-	-	-
Yugoslavia	1,974	-	-	-	11
Peru	9	-	14	15	26
Venezuela	293	307	346	333	319
Spain	-	-	990	-	-
Japan	20	13	53	59	26
Philippine Republic	17	44	23	52	95
Israel	4	-	17	-	2,771
Saudi Arabia	11	30	14	6	7
Egypt	-	-	-	-	20
Liberia	7	9	9	1	-
Others	21	37	348	70	222
Total	26,740	1,363	3,707	2,239	12,415

1/ Preliminary. 2/ Includes Newfoundland and Labrador.
3/ Less than 500 pounds.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Census.

MALTED MILK COMPOUNDS AND MIXES
United States Exports by Country of Destination
Annual 1951-55

Country	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Canada 2/	7	21	19	30	41
Costa Rica	23	52	67	45	11
El Salvador	32	50	50	28	15
Guatemala	62	72	70	56	64
Honduras	39	48	57	65	22
Mexico	42	44	50	21	46
Nicaragua	26	21	35	18	2
Panama	68	57	74	53	76
Panama Canal Zone	52	49	64	46	36
Barbados	3/	4	1	4	2
Bermuda	3/	-	18	5	3
Cuba	186	202	235	260	383
Curacao NWI	240	169	210	121	86
Dominican Republic	60	94	76	83	50
Haiti	33	45	36	42	24
Jamaica	4	-	19	6	17
Belgium	3/	-	18	31	41
Arabian States	25	25	4/	6	-
Iran	104	7	17	12	24
British Malaya	664	490	-	-	-
Ceylon	3,039	2,056	926	1,186	1,364
Hong Kong	8	46	4	7	16
India	768	73	-	-	16
Philippine Republic	707	750	1,116	1,039	1,563
Bolivia	16	31	-	18	2
British Guiana	4	4	4	5	3
Colombia	38	8	11	15	42
Ecuador	18	27	25	15	13
Peru	45	6	12	6	7
Uruguay	47	-	7	10	6
Venezuela	813	490	12	40	40
Belgian Congo	4	8	1	-	10
Liberia	4	8	1	3	6
Mozambique	27	24	24	19	43
Others	105	42	73	27	206
Total	7,310	5,023	3,332	3,322	4,280

1/ Preliminary. 2/ Includes Newfoundland and Labrador.
3/ If any, under "Others". 4/ Less than 500 pounds.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

ICE CREAM POWDER MIX
United States Exports by Country of Destination
Annual 1951-55

Country	1951	1952	1953	1954	1955 1/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Canada 2/	38	68	30	20	37
Costa Rica	3	7	8	18	2
El Salvador	17	16	7	23	7
Guatemala	62	43	56	45	78
Honduras	20	35	3	18	6
Mexico	31	102	56	23	10
Nicaragua	3	8	3	12	12
Panama	34	25	68	48	34
Bahamas	7	35	49	84	63
Bermuda	16	20	14	-	3
Cuba	23	127	41	31	22
Curacao NWI	142	203	126	104	104
Dominican Republic	23	3	3/	-	8
Haiti	10	10	13	39	-
Arabian States	206	269	329	289	37
Lebanon	-	3	2	18	60
Hong Kong	29	16	13	19	19
Indonesia	3	9	10	6	2
Japan	94	107	106	19	5
Philippine Republic	84	35	29	19	23
Thailand	40	44	77	75	24
Colombia	17	15	1	22	8
Peru	-	5	2	3	3
Surinam	12	18	20	6	18
Venezuela	140	133	19	5	3
Belgian Congo	11	21	20	22	21
Liberia	20	21	40	10	1
Mozambique	7	7	2	-	3
Others	262	31	42	66	117
Total	1,354	1,436	1,186	1,044	730

1/ Preliminary. 2/ Includes Newfoundland and Labrador.
3/ Less than 500 pounds.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

INFANT AND DIETETIC FOOD, MILK BASE
United States Exports by Country of Destination
Average 1935-39, Annual 1951-55

Country	Average 1935-39	1951	1952	1953	1954	1955 2/
	1,000 pounds 1/	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
British Honduras	45	2	2	-	-	1
Canada 3/	243	24	170	166	196	184
Costa Rica	27	140	177	174	189	312
El Salvador	9	142	199	192	239	245
Guatemala	18	243	240	259	253	294
Honduras	28	80	89	89	125	141
Mexico	76	1,278	698	1,310	700	744
Nicaragua	5	33	41	35	102	137
Panama	119	136	143	138	154	381
Panama Canal Zone	4/	108	237	27	18	50
Bahamas	5/	-	5	4	17	-
Bermuda	30	6	2	9	7	7
Cuba	191	585	463	380	435	442
Curacao NWI	62	89	110	103	109	106
Dominican Republic	23	91	102	95	111	109
Haiti	10	53	54	59	65	77
Jamaica	61	-	6/	-	-	-
Trinidad & Tobago	39	-	-	-	-	12
Belgium	6/	22	70	97	92	152
Greece	1	11	2	4	5	-
Italy	6/	2	25	-	10	50
Portugal	4	-	3	7	-	2
Turkey	2	15	10	18	4	37
United Kingdom	158	2	6/	-	9	-
Arabian States	5/	4	5	6	5	21
Iran	6/	100	20	28	38	52
Iraq	1	44	89	96	157	195
Israel	14	36	66	15	22	9
Lebanon	5/	-	4	19	15	20
Syria	1	2	3	17	6	9

- Continued -

INFANT AND DIETETIC FOOD, MILK BASE
United States Exports by Country of Destination
Average 1935-39, Annual 1951-55
(Continued)

Country	Average 1935-39	1951	1952	1953	1954	1955 2/
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
	1/					
Ceylon	25	7	108	14	10	20
Hong Kong	21	38	82	130	41	114
India	28	155	97	9	21	20
Indonesia	7	46	-	850	27	1,009
Japan	77	14	6/	-	2	4
Korea	-	-	-	-	2	33
Pakistan	-	2	1	4	8	7
Philippine Republic	223	1,408	416	1,487	735	1,366
Taiwan	-	-	-	-	439	708
Thailand	14	175	193	399	338	444
Argentina	132	176	4	80	360	1
Bolivia	4	86	84	47	77	28
Brazil	7	1,466	722	196	343	124
Chile	4	4	42	1	1	3
Colombia	170	757	545	552	794	1,698
Ecuador	5	99	129	237	145	268
Peru	97	301	325	317	190	196
Surinam	3/	1	2	7	2	2
Uruguay	13	108	168	146	143	124
Venezuela	921	2,826	3,088	3,094	3,144	3,267
Angola	5/	3	1	1	9	29
Belgian Congo	1	4	9	6	-	3
Egypt	3	7	19	66	89	88
Liberia	1	4	6	6/	5	2
Mozambique	11	6	6	3	6/	11
Union of So. Africa	63	142	164	307	227	323
Others	208	20	21	82	34	34
Total	3,202	11,103	9,261	11,382	10,269	13,715

1/ Includes Malted Milk, etc. 2/ Preliminary. 3/ Includes Newfoundland and Labrador. 4/ Included with Republic of Panama. 5/ If any, under "Others". 6/ Less than 500 pounds.

Prepared in Foreign Agricultural Service. Compiled from Foreign Commerce and Navigation of the United States and official records of the Bureau of the Census.

UNITED STATES TRADE IN DAIRY PRODUCTS
AVERAGE 1935-39 and ANNUALLY 1951-55

CONTENTS

	Page
Summary	1
Background of Dairy Products Trade	2
Shipments to Territories	2
Exports of Dairy Products	6
Relief Exports	6
Import Controls of Dairy Products	11
Imports of Dairy Products	13

TABLES AND CHARTS

Dairy Products: Value of U. S. Exports & Imports, Average 1935-39 and 1950-55 (chart)	1
Shipments of Dairy Products to Territories and Possessions, 1940-55	3
Whole Milk Equivalent of United States Trade in Milk, Cream and Dairy Products in Relation to Production 1935-55	3
U. S. Trade in Milk and Dairy Products (chart)	4
Reported Exports & Imports of Principal Dairy Products, U.S. 1920-55	5
U. S. Exports of Selected Dairy Products by Type of Shipment 1949-55	8
Shipments of Dairy Products under Section 416, by Country of Destination	10
Status of Imports of Dairy Products Under Section 22	12
Total Exports of Milk, Cream and Dairy Products, Average 1935-39, Annual 1951-55	14
Total Imports of Milk, Cream and Dairy Products, Average 1935-39, Annual 1951-55	16
Imports by Country of Origin, Average 1935-39, Annual 1951-55:	
Butter	18
Cheese:	
All cheese	19
Cheddar, Swiss and Romano	20
Percorino, Reggiano, Parmesan, Provolone and Roquefort	21
Blue Mold, Edam and Gouda, Sbrinz	22
Other	23
Processed Milk:	
Dried Whole, Dried Skimmed, Dried Buttermilk and Dried Cream	24
Casein	25
Exports by Country of Destination, Average 1935-39, Annual 1951-55:	
Evaporated Milk, Condensed Milk	26
Dried Whole Milk, Nonfat Dry Milk Solids	27
Butter	28
Cheese:	
All Cheese	29
Cheddar (Natural)	30
Processed Cheddar	31
Malted Milk Compounds and Mixes	32
Ice Cream Powder Mix	33
Infant and Dietetic Food, Milk Base	34

Prepared by Dairy and Poultry Division, FAS, June 1955

Reserve
1.943
F117

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D.C.

LIBRARY
OCT 1 1956
U. S. DEPARTMENT OF AGRICULTURE

FD 6-56

June 29, 1956

WORLD OUTPUT OF DAIRY PRODUCTS, FIRST QUARTER, 1956

Factory production of butter, cheese and dried milk was up, canned milk production was down in the major producing countries in the first quarter of 1956, compared with the same quarter of 1955.

Conditions in the Southern Hemisphere were generally favorable for production. Pasture growth was good in New Zealand and dairy production was maintained at a satisfactory level. Rainfall was above normal in most districts of Australia and pastures and feeds were in excellent condition to promote production.

In some countries of Western Europe, production was hampered by continued cold weather which retarded pastures.

Despite changeable weather conditions in various sections of both Canada and the United States, first quarter milk production was well above that of a year ago.

Factory butter production in the January-March quarter, 1956, increased 9 percent over the corresponding quarter of 1955. Output in New Zealand ran well above that of a year ago, reflecting the larger quantity of milk available for butter production. In Australia also, supplies for butter manufacture were heavier and butter production showed a marked gain over the same months a year earlier.

In Denmark, the quantity of milk handled by dairies in the first quarter of 1956 was slightly greater than in the comparable period last year. With less milk required for other uses, the quantity available for butter manufacture rose considerably. Output of butter in the Netherlands showed a marked increase over the previous year, due to increased supplies.

Deliveries to creameries in Ireland were higher than a year ago, and butter production was up. In the United Kingdom, the increased milk production was absorbed mainly in manufacturing outlets, where much of the surplus went into butter. Production was down in Norway and Sweden in this period.

In both Canada and the United States, butter production throughout the quarter gained substantially over the earlier year.

FACTORY DAIRY PRODUCTS: Output in principal producing and exporting countries, 1st quarter (calendar) 1956, with comparisons

Country and Product	Average 1934-38	Average 1946-50	1955 Total 1955	1955 1st Quarter	1955 2nd Quarter	1955 3rd Quarter	1955 4th Quarter	1956 1st Quarter	First Quarter 1956/1955
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	Percent
BUTTER									
Canada	1/ 254,774	277,868	2/ 319,687	2/ 34,312	106,745	117,103	61,527	36,842	107
United States	1,705,240	1,301,830	1,382,400	332,800	440,990	318,945	289,665	352,290	106
Belgium	46,179	55,353	99,355	-	-	-	-	-	-
Denmark	400,660	318,697	2/ 364,200	78,263	109,128	97,884	2/ 78,925	83,113	106
Finland	61,287	3/ 61,215	107,421	2/ 21,363	30,995	31,477	23,586	28,953	136
France 4/	529,000	390,471	644,000	-	-	-	-	-	-
Republic of Germany	5/6/560,000	492,188	639,851	134,968	187,611	2/ 175,867	141,405	-	-
Ireland	89,400	68,648	84,153	3,977	27,462	35,887	16,827	5,331	134
Netherlands	201,000	155,620	2/ 161,992	25,751	56,557	7/ 47,529	7/ 32,155	7/ 28,560	111
Norway	24,930	20,049	23,162	4,640	9,751	6,047	2,724	4,511	97
Sweden	152,769	216,442	185,595	37,805	56,252	55,207	36,331	37,026	98
Switzerland 4/	57,760	36,949	8/ 57,540	11,775	2/ 17,461	16,197	10,961	-	-
United Kingdom	44,200	23,529	33,152	4,928	18,144	6,720	3,360	7,616	155
Argentina	65,742	100,657	125,662	40,345	29,762	22,282	33,273	-	-
Union of So. Africa	9/ 27,725	44,845	78,269	25,432	17,340	14,653	20,844	-	-
Australia	6/ 415,250	354,371	443,901	118,684	65,966	89,515	169,736	134,078	113
New Zealand	6/ 366,912	346,095	2/ 427,061	2/ 123,608	34,541	82,387	186,525	137,552	111
CHEESE									
Canada 9a/	1/ 119,924	114,329	79,238	6,330	27,361	30,925	14,622	6,947	110
United States	643,234	1,156,005	1,353,415	294,200	447,045	342,810	269,360	311,200	106
Denmark	68,820	123,634	2/ 193,344	37,919	63,272	56,659	2/ 35,494	33,069	87
France 10/	7/ 584,000	11/ 424,070	7/ 758,000	-	-	-	-	-	-
Italy 10/	523,513	491,326	767,642	-	-	-	-	-	-
Netherlands	7/ 200,000	176,926	2/ 347,738	51,800	119,562	7/ 102,838	7/ 73,538	7/ 56,482	109
Norway 12/	39,067	35,564	63,552	13,161	22,706	17,255	10,430	15,126	115
Sweden	76,059	115,005	119,275	21,032	41,654	35,225	21,364	22,721	108
Switzerland 12/	111,729	107,232	8/ 132,717	18,915	2/ 37,430	42,802	24,148	-	-
United Kingdom 4/	109,000	69,888	141,120	28,672	60,480	29,568	22,400	42,560	148
Argentina	67,873	203,830	275,575	53,130	41,888	59,447	121,110	-	-
Union of So. Africa	9/ 10,195	17,967	26,553	7,732	2/ 5,645	5,779	7,397	-	-
Australia	6/ 48,400	98,396	87,867	20,747	11,335	21,773	34,012	18,964	91
New Zealand	6/ 210,911	216,842	2/ 212,128	2/ 67,491	2/ 18,436	2/ 32,838	2/ 93,363	64,221	95

CANNED MILK									
Canada 13/	1/ 104,335	266,532	320,504	50,599	105,421	104,715	59,769	57,269	113
United States 14/	1,970,189	3,170,576	2/2,616,400	2/ 576,560	2/ 891,215	2/ 677,300	471,325	556,445	96
Cuba	15/ 32,564	36,655	64,705	-	-	-	-	-	-
Denmark	40,785	58,701	-	-	-	-	-	-	-
France	16/ 28,953	15/ 57,984	-	-	-	-	-	-	-
Netherlands	309,952	181,222	2/ 576,798	112,399	167,697	7/ 162,020	7/ 134,682	7/119,303	106
Switzerland	14,198	13,031	-	-	-	-	-	-	-
United Kingdom	378,560	219,914	2/ 366,464	69,664	159,936	75,264	2/ 61,600	-	-
Argentina	17/ 3,159	15/ 11,914	25,573	-	-	-	-	-	-
Australia	6/ 41,894	132,745	121,135	27,967	12,195	26,237	54,736	-	-
New Zealand	15/ 11,273	-	-	-	-	-	-	-	-
DRIED MILK 18/									
Canada	1/ 26,079	70,876	106,153	13,131	36,261	33,964	22,797	13,982	106
United States	15/ 203,555	913,436	1,587,820	370,900	561,975	339,570	315,375	429,500	116
Belgium	5,500	6,607	34,804	-	-	-	-	-	-
Denmark	2,205	16,866	-	-	-	-	-	-	-
France	16/ 7,685	15/ 3,308	-	-	-	-	-	-	-
Netherlands	56,438	54,468	2/ 117,757	10,318	61,473	7/ 37,912	7/ 8,054	7/ 14,493	140
Sweden	1,351	24,566	23,227	4,118	8,889	6,758	3,462	6,523	158
Switzerland	7,187	10,847	-	-	-	-	-	-	-
United Kingdom	43,098	73,848	2/ 100,128	16,800	46,592	18,816	2/ 17,920	-	-
Argentina	17/ 3,977	15/ 14,070	22,707	-	-	-	-	-	-
Australia	6/ 16,971	54,235	2/ 95,746	22,073	7,971	2/ 20,794	2/ 44,908	-	-
New Zealand	19/ 17,429	-	-	-	-	-	-	-	-

1/ Average 1935-39. 2/ Revised. 3/ Average 1948-50. 4/ Total production. 5/ Average 1935-38. 6/ Production year ending June 30. 7/ Estimated. 8/ Annual production figures more complete than monthly figures used in quarterly data. 9/ Production year ending August 31. 9a/ Cheddar cheese only. 10/ Total cheese, and includes cheese made from the milk of sheep and goats. 11/ For 1948. 12/ Total cheese, and includes cheese made from the milk of goats. 13/ Both bulk and case goods. 14/ Evaporated whole and condensed whole case goods only. (Estimates of bulk types discontinued). 15/ Less than a 5-year average. 16/ For 1937. 17/ For 1939. 18/ Total dried whole milk and dried skim milk for human consumption. 19/ For 1938.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches and other U.S. representatives abroad, and other information. - July 2, 1956.

Cheese production in the opening quarter of 1956 was 6 percent above the corresponding quarter of 1955. Considerably larger quantities of cheese were produced in the Netherlands, Norway and Sweden than a year ago. An increase in manufacturing supplies in the United Kingdom was reflected in higher cheese output compared with a year ago. Production declined in Denmark. Both Australia and New Zealand also reported decreased production in the first quarter. In Canada and the United States, cheese production was heavier than in the opening quarter 1955.

Production of canned milk (condensed and evaporated) was just below the 1955 level. A decline in output of evaporated milk in the Netherlands was offset by an increase in condensed whole and condensed skimmed milk. Most types of canned milk were produced in greater quantity in Canada in the first quarter than in the corresponding period last year; the increase was most pronounced for evaporated whole milk. In the United States, the decline in evaporated milk production brought overall canned milk output below the level of the earlier year.

Dried milk production in the first three months of 1956 rose 16 percent over the preceding year. Total dried milk output was up in the Netherlands, where considerably more dried whole milk was manufactured than in January-March, 1955. Larger quantities of both dried whole milk and non-fat dry milk solids were produced in Sweden than in the previous year. Canada's gain in overall output was due to the increase in production of non-fat dry milk solids. Total output of dried milk in the United States was up in this quarter.

Current Conditions Abroad

Australia:- The prospect is favorable for production of milk and dairy products.

New Zealand:- Pasture growth is generally good and the outlook for winter feed supplies is bright.

Denmark:- Frosts and low temperatures delayed the start of the grazing season.

The Netherlands:- Conditions for production appear to be generally good.

France:- Pastures will be late, due to inadequate rainfall.

Ireland:- Despite some deterioration of pastures, milk production is holding up fairly well.

The United Kingdom:- Livestock are in good condition. In spite of the dry weather, milk production appears to be running ahead of last year.

Canada:- Although weather conditions have been unfavorable in many parts of the country, milk production continues to increase compared with a year earlier.

A summary of this information was published in Foreign Crops and Markets.

42
Reserve
1.943
F117

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D. C.

LIBRARY
CURRENT SERIAL RECORD
OCT 1 1956
U. S. DEPARTMENT OF AGRICULTURE

FD 5-56 June 18, 1956

WORLD PRODUCTION OF BUTTER AND CHEESE - 1955

Butter

World butter production declined slightly in 1955. The estimated output of 9,510 million pounds was 56 million pounds less than 1954 production and only 92 percent of the average world production for the prewar period.

The bulk of the decline in butter production was registered in the United States--the world's largest butter-producing nation; United States production of 1,551 million pounds of butter in 1955 represented a drop of 77 million pounds from the 1954 output. In spite of a higher milk production in 1955, the United States had a better balance between production and consumption of milk, which was reflected in less milk going to factory uses, particularly buttermaking.

Canada showed a slight gain in butter output, while Cuban production remained the same. Other North American countries showed a small net decline in production. Total production in the area in 1955 stood at less than 75 percent of prewar, due primarily to the decline in U. S. output from the 1935-39 average.

Europe, which annually supplies slightly less than one-half of the world butter production, also showed a decline of just over 1 percent from 1954 with a total estimated output of 4,575 million pounds. The loss in the area was confined primarily to Western European countries. Adverse weather conditions in the latter part of the year affected milk production and resulted in smaller supplies going to butter, although increased use of milk for cheese was also a factor in some countries. Denmark and the Netherlands, both prominent exporters of butter, showed the largest declines in Europe. The two Western European countries showing increases over 1954, Greece and Italy, were largely unaffected by the adverse weather of late 1955.

Eastern European butter production was up more than 6.5 percent, due largely to the expanded factory output in the Soviet Union; factory production in Russia was reported at 1,012 million pounds, an 18-percent increase over 1954.

Total butter manufacture in Europe is still less than 94 percent of the prewar butter production because Eastern Europe produced only about 81 percent of its 1935-39 average output. In Western European countries butter production remained above the prewar level, in spite of the general decline in 1955 milk production.

For the fourth consecutive year, Oceania butter production showed an increase over the previous year; total output of 904 million pounds was 65 million pounds over 1954. In 1955, both Australia and New Zealand, primary butter exporters,

BUTTER: Estimated World Butter Production, 1/ Averages 1934-38, 1946-50, Annual 1952-1955

Continent and Country	Average 1934-38	Average 1946-50	1952	1953	1954	1955 2/
	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds
North America						
Canada	3/ 348	331	306	326	334	338
United States	2,210	1,596	1,402	1,607	1,628	1,551
Cuba 4/	3/ 4	3	3	4	5	5
Other North America 5/	21	22	21	21	21	20
Total North America	2,583	1,952	1,732	1,958	1,988	1,914
South America						
Argentina 4/	66	101	102	127	134	126
Brazil 5/	72	90	102	99	104	105
Peru	5/ 2	6/ 4	4	4	4	5/ 3
Uruguay	7/ 2	5	8	8	5/ 9	5/ 7
Venezuela 4/	1	3	3	4	6	6
Other South America 5/	29	17	17	17	17	18
Total South America	172	220	236	259	274	265
Europe						
Austria	51	46	65	67	71	69
Belgium	8/ 156	128	168	193	201	199
Denmark	401	319	340	381	399	364
Finland	5/9/ 121	75	137	140	144	134
France	5/ 529	407	560	606	657	644
Germany, Western	10/11/ 681	12/ 544	667	710	748	719
Greece 13/	14/ 13	9	16	16	19	21
Ireland	10/ 149	115	110	119	130	124
Italy	111	12/ 106	128	130	136	143
Luxembourg 4/	5	6	8	9	10	10
Netherlands	15/ 239	156	161	183	180	162
Norway	51	34	36	40	35	35
Portugal 4/	11/14/ 4	3	5	6	6	5
Sweden	190	227	212	221	208	190
Switzerland	58	37	49	52	64	58
United Kingdom	15/ 101	41	34	52	69	51
Yugoslavia 5/ 16/	24	-	18	23	22	5/ 22
Other Europe (including U.S.S.R.5/	2,000	1,410	1,475	2/ 1,500	2/ 1,525	2/ 1,625
Total Europe	4,884	3,663	4,189	4,448	4,624	4,575
Africa						
Kenya 4/ 11/	10/ 3	6	9	7	10	5/ 11
Union of South Africa	17/ 41	57	70	73	81	86
Other Africa 5/ 18/	73	114	114	115	125	130
Total Africa 18/	117	177	193	195	216	227
Asia, - Total 5/ 18/	1,773	1,600	1,620	1,625	1,625	1,625
Oceania						
Australia	11/ 437	365	343	361	413	459
New Zealand	11/ 379	359	448	444	421	440
Other Oceania 5/	-	4	5	5	5	5
Total Oceania	816	728	796	810	839	904
Estimated World Total 18/	10,345	8,340	8,766	9,295	9,566	9,510

1/ Includes farm butter. 2/ Preliminary. 3/ Average 1935-39. 4/ Creamery butter only. 5/ Estimated. 6/ Average 1949-50. 7/ Average 1937-39. 8/ Average 1936-38. 9/ Average 1936-39. 10/ Average 1935-38. 11/ Years ending June 30. 12/ Average 1948-50. 13/ Made from the milk of cows, buffaloe, sheep and goats. 14/ Average 1933-37. 15/ For 1939. 16/ Made from the milk of cows, sheep and goats. 17/ Years ending August 31. 18/ Includes product weight of ghee in those countries where ghee production is common, especially India, Turkey, Egypt and other Middle and Far Eastern countries.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches, and other U. S. representatives abroad, and other information. June18, 1956.

BUTTER: - Factory production in specified countries, averages 1934-38, 1946-50, annual 1952-55

Country	Average 1934-1938	Average 1946-1950	1952	1953	1954	1955 1/
	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds
Canada	2/ 256	280	282	304	315	320
United States	1,705	1,302	1,188	1,412	1,449	1,382
Cuba	2/ 4	3	3	4	5	5
Argentina	66	101	102	127	134	126
Brazil 3/	4/ 51	45	58	55	5/ 60	5/ 58
Uruguay	6/ 1	5	7	7	5/ 8	5/ 6
Venezuela	1	3	3	4	6	5/ 6
Austria	5/ 34	7/ 41	43	45	49	47
Belgium	4/ 46	55	76	91	99	99
Denmark	401	319	340	381	399	364
Finland	8/ 69	9/ 62	100	106	113	107
France	5/ 220	-	-	-	5/ 492	5/ 483
Germany, Western	10/11/ 560	9/ 492	597	635	668	640
Ireland	10/ 89	69	74	79	88	84
Luxembourg	5	6	8	9	10	10
Netherlands	12/ 230	156	161	183	180	162
Norway	24	20	23	28	23	23
Portugal	11/13/ 4	3	5	6	6	5
Sweden	153	216	206	216	204	186
Switzerland	5/ 57	5/ 36	5/ 48	5/ 51	63	56
United Kingdom	12/ 54	24	16	34	51	33
Union of Soviet Socialist Republics	14/15/ 392	16/ 595	818	842	858	5/ 1,012
Kenya 11/	10/ 3	6	9	7	10	5/ 11
Union of South Africa	17/ 28	45	62	65	73	78
Japan	6	9/ 4	9	12	15	16
Australia	11/ 415	354	332	350	398	444
New Zealand	11/ 367	346	435	431	408	427
Total of above countries	5,241	18/ 4,588	18/ 5,005	18/ 5,484	6,184	6,190

1/ Preliminary. 2/ Average 1935-39. 3/ Production in Federally inspected plants only. 4/ Average 1936-38. 5/ Estimated. 6/ Average 1937-39. 7/ Average 1949-50. 8/ Average 1936-39. 9/ Average 1948-50. 10/ Average 1935-38. 11/ Years ending June 30. 12/ For 1939. 13/ Average 1933-37. 14/ Average 1935-37. 15/ Includes only Estonia, Latvia and Lithuania of the Territory subsequently included in U.S.S.R. 16/ Average for three years. 17/ Years ending August 31. 18/ Total 26 countries only.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches, and other United States representatives abroad, and other information. June 18, 1956.

showed gains; Australia's production was 11 percent above 1954, while New Zealand's output was 4.5 percent greater. New Zealand's increase in butter output reversed a 3-year decline; the gain was due, in part, to better weather conditions and higher milk output and in part to a diversion from cheese and processed milk products.

Butter production in Oceania rose above the prewar level in 1954; with the increased output in 1955, production was more than 10 percent greater than the prewar average.

With estimated production remaining at the previous year's level in India and Pakistan, butter output in Asia showed no change in 1955. In Africa, good weather during 1955 and large numbers of animals milked resulted in higher milk production and an increased butter output. In the Union of South Africa, some of the gain in butter was made at the expense of milk going to other processing.

While Asia's production of butter and ghee is still somewhat lower than the prewar period, African output during 1955 was almost double the estimated average for the prewar years.

Cheese

The year 1955 marked the seventh consecutive year in which cheese production showed a net gain in the 24 reporting countries. The net increase was small; the 5,379 million pounds recorded in 1955 was only 12 million pounds more than that reported for 1954.

The increase, however, was made in spite of the fact that 9 countries showed declines in cheese output, some of which were extremely heavy. The largest loss, both absolutely and relatively, was recorded in the United Kingdom, where the production of 141 million pounds of cheese was 42 million pounds, or 23 percent, under the 1954 level. The decline in cheese as well as butter was attributed to the reduced milk supplies resulting from inclement weather and a greater utilization of milk in fluid uses and condensing operations.

Australia and New Zealand also showed large relative declines of the total 1955 cheese production of 89 and 212 million pounds respectively; both were more than 10 percent under the 1954 output. In both instances the declining cheese production was due mainly to a shift to butter.

The production of cheese in 1955 declined in both Canada and the United States. The decline of 30 million pounds to 1,353 million pounds in 1955 in the United States was due, as also in the case of butter, to a more favorable balance between milk production and consumption. The increased use of fluid milk and more milk going to butter in 1955 was responsible for Canada's decline of 6.5 percent in cheese production to 87 million pounds.

The European countries showing declining cheese production in 1955--Finland, Norway, Sweden, and the United Kingdom--all had lowered milk production and, with the exception of Norway which maintained its 1954 level, smaller butter production totals. All the other European countries showed gains in cheese production--some of a substantial nature. Denmark, Germany, Ireland, and the Netherlands had lower milk production levels in 1955 and reported lower butter production figures; consequently, the gains in cheese were due in some measure to diversion of milk from butter to cheese. Denmark, for example, had a 14-million-pound gain (7.8 percent) to 193 million pounds of cheese in 1955; yet milk production was down almost 5 percent, and butter production more than 8 percent.

In contrast, Belgium and Switzerland had greater milk production to go with the larger cheese output and smaller production of butter. Cheese manufactured in Belgium totaled 24 million pounds in 1955, 1 million more than that reported for 1954. Switzerland production jumped 12 million pounds to 133 million pounds in 1955.

Italy and Greece, both of which had increased milk and butter production in 1955, also showed considerable gains in cheese. Italy's output of 768 million pounds in 1955 represented a 26-million-pound increase (about 3.5 percent) over 1954. The 18-million-pound increase in Greece to 158 million pounds represented a gain of almost 13 percent.

The loss in total cheese production in 1955 in Uruguay, as well as the decline in butter, was due primarily to a smaller milk production during the year. On the other hand, the Union of South Africa had an increase in milk output, but cheese production remained unchanged because of a greater utilization of milk in butter manufacture.

In comparison with the prewar period, total production of 5,379 million pounds of cheese in 1955 in the 24 countries represented a net gain of 52.5 percent over the 1934-38 period. Only 3 countries, Canada, Uruguay, and Austria, whose combined cheese production in 1955 represented less than 2.5 percent of the 24-country total, showed lower production. In several instances, cheese production in 1955 was more than double the prewar output. The United States has gained 710 million pounds (more than 110 percent) in cheese production since prewar, and now produces more than 25 percent of the 24-country total cheese output. Italy shows the next largest absolute increase; the gain of 244 million pounds put Italian cheese production in 1955 at 146 percent of the prewar output.

Of the large cheese producers, Argentina showed the greatest relative gain since prewar. The 276 million pounds produced in 1955 was more than 400 percent of the 68 million pounds reported during the prewar period.

The above report is one of a regularly scheduled series on world agricultural production approved by the Foreign Agricultural Service Committee on Foreign Crops and Livestock Statistics. It is based in part upon reports of Agricultural Attaches and other U. S. representatives abroad.

CHEESE: Factory production 1/ in specified countries, averages 1934-38, 1946-50, annual 1952-1955

Country	Average 1934-38	Average 1946-50	1952	1953	1954	1955 2/
	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds
Canada	3/ 120	118	74	82	92	86
United States	643	1,156	1,170	1,344	1,383	1,353
Cuba	4/ 3	6	5	6	5	5
Argentina	68	204	224	242	239	276
Brazil 5/	6/ 60	46	63	69	7/ 70	7/ 75
Austria	4/ 37	14	23	29	31	33
Belgium	15	10	18	19	20	21
Denmark	69	125	190	192	179	193
Finland	8/ 23	18	43	48	50	49
Germany, Western	9/10/ 276	11/ 280	340	355	343	349
Ireland	4	5	6	4	4	6
Netherlands	7/ 200	177	278	313	327	348
Norway 12/	40	35	69	61	66	64
Portugal 12/	4/ 1	3	3	4	4	5
Sweden	76	115	132	120	122	119
Switzerland 12/	7/ 104	7/ 100	7/ 114	7/ 122	112	123
United Kingdom	13/ 72	65	116	190	175	133
Union of South Africa	14/ 10	18	22	23	27	27
Australia	10/ 48	99	100	107	107	88
New Zealand	10/ 211	217	226	240	237	212
Total of above countries	2,080	2,811	3,216	3,570	3,593	3,565

1/ Whole milk cheese made from cows' milk, unless otherwise noted. 2/ Preliminary. 3/ Average 1935-39. 4/ For 1937. 5/ Production in Federally-inspected plants only. 6/ Average 1936-38. 7/ Estimated. 8/ Average 1936-39. 9/ Average 1935-38. 10/ Years ending June 30. 11/ Average 1948-50. 12/ Including goats' milk cheese. 13/ For 1939. 14/ Years ending August 31.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches and other United States representatives abroad, and other information. June 18, 1956.

CHEESE: Total production 1/ in specified countries, averages 1934-38, 1946-50, annual 1952-1955

Country	Average 1934-38	Average 1946-50	1952	1953	1954	1955 2/
	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds
Canada	3/ 121	119	74	82	93	87
United States	643	1,156	1,170	1,344	1,383	1,353
Cuba 4/	5/ 3	6	5	6	5	5
Argentina 4/	68	204	224	242	239	276
Brazil	6/ 93	7/ 92	7/ 126	7/ 132	7/ 132	7/ 132
Uruguay	5/ 11	7/ 16	16	14	11	7/ 10
Austria	8/ 69	16	27	33	34	36
Belgium	18	7/ 13	21	22	23	24
Denmark	69	125	190	192	179	193
Finland	7/9/ 25	18	43	48	50	49
France 10/	7/ 584	403	605	640	758	7/ 758
Germany, Western 4/	11/12/ 276	13/ 280	340	355	343	349
Greece 14/	15/ 129	85	126	126	140	158
Ireland 4/	4	5	6	4	4	6
Italy 10/	524	491	684	721	742	768
Netherlands	267	212	315	350	360	382
Norway 16/	7/ 50	43	71	63	68	66
Portugal 4/ 16/	5/ 1	3	3	4	4	5
Sweden	7/ 88	115	132	120	122	119
Switzerland 16/	112	107	123	131	121	133
United Kingdom	17/ 101	70	123	197	183	141
Union of South Africa	18/ 11	18	23	24	28	7/ 28
Australia	12/ 49	100	101	108	108	89
New Zealand	12/ 211	217	226	240	237	212
Total of above countries	3,527	3,914	4,774	5,198	5,367	5,379

1/ Whole milk cheese made from cows' milk unless otherwise noted. 2/ Preliminary. 3/ Average 1935-39. 4/ Factory cheese only. 5/ For 1937. 6/ Average 1936-38. 7/ Estimated. 8/ Average 1934-37. 9/ Average 1937-39. 10/ Including goats' milk and sheep's milk cheese. 11/ Average 1935-38. 12/ Years ending June 30. 13/ Average 1948-50. 14/ Including goats' milk, buffalos' milk and sheep's milk cheese. 15/ Average 1933-37. 16/ Including goats' milk cheese. 17/ For 1939. 18/ Years ending August 31.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches, and other United States representatives abroad, and other information. June 18, 1956.

UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

Penalty for private use to avoid
payment of postage $300.

ne
13
7

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D.C.

FD 4-56 June 8, 1956

MILK PRODUCTION AND UTILIZATION IN PRINCIPAL PRODUCING COUNTRIES IN 1955

The postwar upward rise in milk production leveled off somewhat during 1955 in 18 primary producing countries with total production of 356,293 million pounds representing a gain of only 0.6 percent over 1954.

The small gain was accomplished primarily through increased output in North America and Oceania. Unlike 1954 when weather conditions were generally favorable to milk production, output in European countries in 1955 was seriously curtailed by drought and inclement weather, particularly during the last part of the year. Only 4 of the 14 European countries showed gains in production from 1954 and in 2 of these, Belgium and Switzerland, the gains were not large. Fairly large increases were recorded for Italy and Greece, but these countries were not appreciably affected by the adverse fall-weather conditions.

Since European production in 1955 was 1,575 million pounds below 1954, the increase in output in 1955 was due almost entirely to the gain of 7 percent in Oceania and slightly more than 1 percent in North America. Increased production in each area amounted to more than 1,600 million pounds.

Declines in production were relatively large, but none was more than 571 million pounds; this was recorded in Denmark and represented a drop of 4.8 percent from 1954 production. Ireland's decline of 4.5 percent under 1954 levels entailed a drop of only 247 million pounds. This absolute loss was exceeded by the losses of France (454 million pounds), the United Kingdom (362 million pounds) and Germany (322 million pounds). The largest absolute increase was made in Australia where a gain in cow's milk production of 1,355 million pounds amounted to a 10.8 percent rise over 1954. However, the largest relative gain was made in Greece where production of cow's milk rose from 587 million pounds in 1954 to 701 million pounds, an increase of 19.4 percent. The United States increased its cow's milk output by 1,260 million pounds, representing an increase of 1 percent in 1955 over 1954.

Of the 8 countries showing gains in production from 1954 to 1955, 3 recorded the gains solely through increased production per cow; these countries were the United States, Belgium and New Zealand. Two, Canada and Switzerland, obtained their higher production in 1955 through greater cow numbers while 3, Greece, Italy and Australia, reported their gains as due both to increased output per cow and larger numbers of cows being milked. Of the countries showing declines in production, only the Netherlands and Norway recorded increased output per cow. A summary of this information was published in the May 21, 1956 issue of Foreign Crops and Markets.

COW'S MILK: Production and utilization in specified countries, 1955 (preliminary) and 1954.

Country	Production			Utilization					
	Milk cows	Production per cow	Milk production	Fluid milk 1/	Butter	Cheese	Canned milk	Other uses 2/	Feed
	1,000 Head	Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds
1955									
Canada	3/ 3,312	5,216	17,277	6,403	7,873	958	707	760	576
United States	21,232	5,815	123,554	58,300	30,795	13,420	6,290	11,445	3,304
Austria	1,178	4,598	5,417	2,671	1,608	363	4/	4/ 10	765
Belgium	975	8,495	8,283	1,861	5,421	168	66	9	758
Denmark	1,479	7,654	11,321	1,581	7,485	1,268	4/	4/ 359	628
Finland	1,155	5,525	6,381	2,767	2,927	512	-	-	175
France	9,352	4,321	40,406	8,399	16,912	6,356	4/	4/ 567	8,172
Germany, Western	5,749	6,482	37,273	12,802	16,687	2,187	5/ 1,318	5/ 104	4,175
Greece	322	2,176	701	392	94	64	-	-	151
Ireland	1,198	4,385	5,253	1,092	3,069	72	4/	4/ 299	721
Italy 6/	4,000	4,483	19,454	5,539	3,669	5,827	20	18	4,381
Netherlands	1,508	8,498	12,813	3,206	3,532	3,549	1,176	526	824
Norway 7/ 8/	658	5,579	3,718	1,872	829	456	4/	4/ 73	488
Sweden	1,514	6,060	9,173	3,538	4,030	886	15	254	450
Switzerland 8/	893	7,000	6,290	2,293	1,214	1,486	4/	4/ 173	1,124
United Kingdom	3,704	6,421	23,834	17,510	1,360	1,493	927	773	1,771
Australia 9/	2,338	5,956	13,925	2,803	9,184	1,003	246	380	309
New Zealand 9/	1,995	5,624	11,220	998	7,706	2,045	4/	4/ 162	309
1954									
Canada	3/ 3,233	5,228	16,902	6,148	7,786	1,022	676	675	595
United States	21,581	5,657	122,294	56,200	32,249	13,732	6,130	10,639	3,344
Austria	1,182	4,735	5,597	2,764	1,699	350	4/	4/ 14	770
Belgium	990	8,247	8,165	1,833	5,448	150	40	2	692
Denmark	1,506	7,897	11,892	1,620	8,179	1,215	4/	4/ 338	540
Finland	1,158	5,549	6,425	2,637	3,082	529	-	-	177
France	9,203	4,440	40,860	8,399	17,252	6,356	4/	4/ 681	8,172
Germany, Western	5,831	6,506	37,595	12,707	17,372	2,101	5/ 1,166	5/ 126	4,123
Greece	286	2,053	587	349	75	39	-	-	124
Ireland	1,204	4,568	5,500	1,090	3,208	54	4/	4/ 377	771
Italy 6/	3,800	4,456	18,523	5,425	3,494	5,594	25	35	3,950
Netherlands	1,547	8,353	12,937	3,267	3,998	3,418	1,030	400	824
Norway 7/ 8/	679	5,429	3,734	1,856	833	476	4/	4/ 73	496
Sweden	1,542	6,248	9,636	3,571	4,575	889	15	79	507
Switzerland 8/	886	7,000	6,245	2,305	1,344	1,356	4/	4/ 204	1,036
United Kingdom	3,728	6,476	24,196	17,376	1,669	1,947	701	721	1,782
Australia 9/	2,263	5,555	12,570	2,712	7,701	1,094	309	445	309
New Zealand 9/	1,999	5,455	10,905	986	7,375	2,058	4/	4/ 169	317

COW'S MILK: Production and utilization in specified countries, 1934-38

Country	Production			Utilization						
	Milk Cows	Production per cow	Milk Production	Fluid Milk 1/	Butter	Cheese	Canned Milk	Other Uses 2/	Feed
	1,000 Head	Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds
Canada 3/	10/ 3,780	4,043	15,284	4,602	8,144	1,347	218	181	792
United States	23,933	4,291	104,930	42,520	44,363	6,503	4,607	4,198	2,739
Austria 11/	1,210	4,630	5,602	3,068	1,212	661	-	-	661
Belgium	967	7,022	6,790	1,433	4,321	163	15	42	816
Denmark 9/ 12/	1,692	6,905	11,684	1,433	9,314	331	4/	4/ 55	551
Finland	1,309	4,268	5,587	2,556	2,735	205	-	-	91
France	8,400	3,929	33,000	7,935	12,375	5,000	4/	4/ 190	7,500
Germany, Western 9/ 13/	6,049	5,467	33,069	10,295	17,306	1,279	4/	4/ 331	3,858
Greece 12/	181	1,384	251	181	54	16	-	-	-
Italy	3,466	3,968	14/ 13,750	3,700	2,700	3,600	24	626	3,100
Netherlands	1,460	7,658	11,180	2,321	5,536	2,291	4/	4/ 520	512
Norway 9/ 12/	802	3,683	2,954	1,124	1,111	489	4/	4/ 53	177
Sweden 9/ 12/	1,947	5,258	10,238	3,283	5,170	782	4/	4/ 44	959
Switzerland 8/ 12/	902	6,297	6,041	2,125	1,497	1,303	4/	4/ 49	1,067
United Kingdom	3,300	5,583	18,424	11,100	2,800	1,008	647	686	2,183
Australia 9/	2,545	4,629	15/ 11,780	1,612	9,466	444	4/	4/ 258	-
New Zealand 9/	1,787	5,694	10,176	665	7,255	1,969	4/	4/ 127	160

1/ Includes milk used for cream. 2/ Includes milk used for ice cream, dried whole milk, minor products, waste and balance, unless otherwise indicated. 3/ Includes cows kept mainly for milk. 4/ Canned milk included with other uses. 5/ Dried milk utilization included with canned milk. 6/ Production and utilization include sheep and goat milk. 7/ Yeard ending March 31. 8/ Production and utilization include goat milk. 9/ Years ending June 30. 10/ Average 1935-39. 11/ For 1934. 12/ Average 1933-37. 13/ Average 1935-38. 14/ For 1938. 15/ Excludes milk fed to calves.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches and other U.S. Representatives abroad and other information. May 14, 1956.

Only Sweden and Austria produced less milk in 1955 than during the prewar period. For all countries with prewar information, 1955 production is almost 17 percent over that of prewar.

Fluid milk utilization increased for the second consecutive year; in 1955 such use increased a net total of 2,782 million pounds in the 18 countries, or 1,052 million pounds more than the net total gain in production. The gain in fluid use was made at least partially at the expense of butter and cheese; milk used in butter and cheese manufacture declined 2,944 million pounds and 267 million pounds respectively. Fluid milk took 37.6 percent of total production of the 18 countries in 1955 compared to 37.0 percent in 1954.

Of the 8 countries showing gains in total production 7 registered increased utilization for fluid milk purposes. Only Switzerland, which had a slight upturn in production, showed less milk going to fluid use in 1955 than in 1954. Five of the countries which had smaller production outturns in 1955 showed increases in fluid milk use; these were Finland, Germany, Ireland, Norway and the United Kingdom. France, which showed a production decline, maintained its fluid milk use at the 1954 level. Only Austria, the Netherlands, Denmark and Sweden had lesser quantities of milk for fluid use accompanying their production declines. In no instance, however, was the loss more than 3.5 percent from the 1954 utilization.

Of the countries showing increased use of fluid milk, the United States showed the largest absolute gain, 2,300 million pounds, an increase of 3.7 percent over 1954. Neighboring Canada showed a slightly larger relative gain as the 6,403 million pounds used for fluid purposes in 1955 represented 104.1 percent of the previous year's use. Greece, however, laid claim to the largest relative gain, the 392 million pounds of cow's milk used for fluid consumption in 1955 was 12.3 percent higher than use in 1954.

Fluid milk use in 1955 in 17 of the countries was almost one-third more than during the prewar period and was substantially greater than the estimated 20 percent gain in population between prewar and 1955.

The year 1955 also saw a reversal of the three-year climb in milk supplies going to butter manufacture. In 1955 milk utilized for butter accounted for 124,395 million pounds in the 18 countries as compared to 127,339 million pounds in 1954. As a consequence, the proportion of milk being used in churning butter dropped to 34.9 percent of all milk produced, whereas the proportion in 1954 was 35.9 percent.

Italy, Australia and New Zealand were the only countries diverting more milk to churning in 1955 than in 1954. Italy, one of the countries showing increased use, is a net importer of butter and the increased utilization was for home consumption; in Australia and New Zealand, on the other hand, butter is an exported item. Increased utilization in Australia was due in part to expanding milk production and partly to diversion of milk from cheese to butter production because of lower returns for cheese on the United Kingdom market. The 9,184 million pounds going to butter in Australia in 1955 was almost 20 percent above

that utilized in the previous year. The slight increase in New Zealand utilization was occasioned in part by an encouraging butter market situation for that country outside Great Britain.

As a result of the overall drop in milk for butter, the amount now going to butter in the countries for which comparable data exist was only 89.6 percent of the prewar quantity, compared with 91.7 percent of prewar in 1954. In 1955, 10 of the countries were using less milk for butter than they used in the prewar period. The country showing the largest decline was the United States which in 1955 used only 30,795 million pounds of milk for buttermaking, compared to 44,363 million pounds in prewar, a drop of more than 30 percent. France, on the otherhand, increased its use of milk for butter by almost 37 percent over the prewar level.

Milk utilized for cheese during 1955 showed a slight net decline of 267 million pounds from 1954. There were 8 countries which increased the amounts of milk going to cheese production and 1, France, which maintained its 1954 level of utilization. However, the absolute increases, of which Italy's was the largest at 233 million pounds, could not offset the heavier declines recorded by the United Kingdom and the United States, down 454 and 312 million pounds respectively, from 1954.

Oddly, all 8 of the countries showing increased use of milk for cheese were from Europe and 5 of them showed declines in total milk output.

Milk going to cheese manufacture in 1955 in those countries for which comparable data are available was almost 154 percent of prewar. Only three countries, Canada, Austria and Norway reported less milk going to cheese in 1955 than in the prewar period. Several countries, among them the United States, have more than doubled the amount of milk going to cheese in that time; Denmark now utilizes 383 percent of the prewar quantity used.

Other uses of milk, particularly condensed, evaporated and powdered milk production, registered a gain of 9 percent over 1954; in 1955, 26,677 million pounds of milk were reported used for these purposes as compared to 25,070 million pounds in 1954. United States processers used 966 million pounds more than the 16,769 million pounds used in 1954. Canada used another 116 million pounds over the previous year, an increase of about 8.6 percent. Both the United Kingdom and the Netherlands utilized about 1,700 million pounds of milk for processing, increases of about 19 percent for 1955 over 1954. The only substantial decline was found in Australia where only 626 million pounds was utilized for processed products compared with 754 million pounds in 1954.

Milk fed to livestock in 1955 was up 1.9 percent over 1954 levels. Declines in North America and Oceania were offset by a net gain in Europe where 6 countries increased the amounts fed back to livestock.

This is one of a series of regularly scheduled reports on world agricultural production approved by the Foreign Agricultural Service Committee on Foreign Crops and Livestock Statistics. It is based in part upon reports of U.S. foreign agricultural officers.

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D.C.

JUN
U. S. DEPARTMENT OF AGRICU

FD 3-56 May 1, 1956

BUSINESS OPPORTUNITIES WITH REFERENCE TO RECOMBINED MILK AND DAIRY PRODUCTS IN CERTAIN NEAR AND MIDDLE EAST COUNTRIES

By D. R. Strobel 1/

Introduction

There continues to be a potential market for large quantities of dairy products in the Near and Middle East. 2/ The per-capita availability of milk and milk products is low, according to United States standards. However, such factors as food habits, income, governmental attitude, and desire to protect local supplies of milk must be considered in determining the extent to which the market can be developed, and the time such development will require.

This report is limited to those countries where practical and feasible prospects exist for either supplementing the normal milk supply with recombined milk and dairy products or by establishing a plant for recombining operations.

EGYPT

Cairo, with a population of between 2,500,000 and 3,000,000, has an estimated milk supply of 200,000 liters per day. This is principally raw milk not subjected to routine inspection for quality. The milk is

1/ The author, who is Chief of the Foreign Marketing Branch of the Foreign Agricultural Service, acknowledges the valuable assistance and information supplied by Agricultural Attaches and their staffs, and other United States Government representatives abroad; and local Government officials and members of the dairy industry in the countries surveyed.

2/ Earlier information regarding this potential market was published in Foreign Agriculture Circulars FD 9-54, "The Role of Recombined Milk and Butter Oil in the Export Distribution of Dairy Products," and FD 3-55, "Marketing Dairy Products as Ghee and Recombined Milk in the Near and Middle East and Sections of Europe."

sold for approximately 15 cents per liter. Accurate production figures are not available, but it is apparent that a significant volume of ice cream is sold in Cairo. It is produced by small, local operations and resembles an "ice milk product" varying in composition and in quality, and retails for 7.2 cents for a 100-gram cup.

Proposed New Plant

Plans have been finalized for the construction in the near future of a milk pasteurization plant in Cairo. Its initial capacity reportedly will be 50 tons of milk daily, with possible expansion to 100 tons. According to available information, it will be equipped by a Scandinavian equipment concern. It is also reported that the Ministry of Wakfs will hold controlling interest with the remainder of the stock held by banking interests and private investors. The plant will process milk and ice cream.

Possibility of Supplemental Supply

Indications are that when the new plant is placed in operation the raw milk received for processing will be subjected to quality tests. It is believed that a high percentage of the present supply would fail to meet minimum sediment, bacteriological and adulteration tests.

Supplementing the local supply with recombined milk would assure that the plant has an economical operating volume until the local supply has been further developed in both volume and quality. In addition, the high fat milk of the Gamousa, which constitutes the bulk of the Cairo milk supply, could be "toned" by the addition of reconstituted nonfat dry milk solids to a 3.5 or lower per cent fat milk. It is also feasible and practical for the new plant to utilize nonfat dry milk solids and anhydrous milk fat as ingredients for ice cream production.

It was explained how United States ingredients could be used to supplement the present supplies of milk and ice cream. Their recommended use appeared to be favorably received. Managerial and technical assistance by United States industry in operating the new plant was also discussed, and the reaction appeared favorable.

Export Suppliers

Countries which were the leading exporters of dairy products to Egypt in 1955 by major products were: 3/

Product and Source	Pounds
Milk preserved in powder sweetened or not	
United Kingdom	239,982
Australia	20,635
Canada	12,346
Netherlands	545,671
United States	195,034

3/ Information supplied by U.S. Agricultural Attache. Based on Statistics Department, Egyptian Ministry of Finance.

Product and Source	Pounds
Milk preserved condensed not sweetened	
Netherlands	577,603
United States	220
Milk preserved condensed sweetened	
United Kingdom	165
Australia	3,488
Denmark	7,372
Netherlands	1,054,667
Butter, fresh or salted	
United Kingdom	228,161
Australia	43,254
Cheese	
Australia	33,016
New Zealand	114,500
Argentina	22,275
France	75,803
Netherlands	2,982,406
United States	25,820

Import Duties 4/

Product	Import Duties per 100 Kg. (220 lbs.)
Whole milk or skim milk or sour milk	L.E. 1.250 plus 8% of the total value ($3.60)
Cream (fresh or preserved)	L.E. 5.00 + 8% of the total value ($14.40)
Milk powder	Nil
Condensed milk (unsweetened)	L.E. 1.500 plus 3% of the total value ($4.32) - including cans
Condensed milk (sweetened)	L.E. 2.250 plus 3% of the total value ($6.48) - including cans
Ghee	L.E. 2.750 plus 8% of the total value ($7.92)
Butter	L.E. 3.00 plus 8% of the total value ($8.64)
Kashkawal cheese or white cheese in water	L.E. 3.00 plus 8% of the total value ($8.64)
Other kinds of cheese	L.E. 3.75 plus 8% of the total value ($10.80)

Note: There is also a 7% duty which is a general duty on all imports.

4/ Information supplied by U.S. Agricultural Attache: Source: Egyptian Customs Department.

IRAN

Statistical information on Iran is limited. The annual milk production is approximately 2.3 billion pounds, which is sufficient to provide each person with about 120 pounds of milk annually.

Milk in Iran is consumed principally in a processed form. This pattern of consumption has prevailed for years due to the lack of refrigeration and the non-availability of an insured, high quality fluid supply. Extensive educational work will be required before fluid fresh milk is accepted as a normal daily food requirement. It was observed in Teheran that apparently large quantities of a fermented product known as "mast" is consumed. This product can best be described as between a "clabbered milk" and yoghurt. It is a high-acid product but many of the consumers add sugar before eating it. Mast is marketed principally in small earthenware pots holding approximately 8 ounces and retailing for 7.8 cents.

Other dairy products that would have a market in Iran are ghee and ice cream. A small quantity of bottled, pasteurized milk retailing for 10.4 cents for one-half liter is found on the Teheran market. The ice cream produced is an "ice milk" type made in small quantities in stores.

Ghee

The bulk of the ghee consumed is manufactured locally, and seventy-five per cent of it is reported to contain fat from the "fat-tail" sheep. It was also reported that only 15 to 25 per cent of the local product is made from pure butterfat.

The sheep ghee retails for 71 to 79 cents a pound. Imported vegetable ghee retails from 30 to 40 cents per pound. In spite of the price differential there is a definite preference for the animal fat product. The latter apparently sells readily at the above price and the import of the vegetable type is small. The Iranian consumer desires a granular texture in both types of product. The local ghee does not have a "strong flavor" and is white. However, there is apparently no objection to color in the ghee, and a local merchant stated that a "strong flavored" imported product was not as desirable as the mildly flavored local product.

New Plant Possibility

A local business man in Teheran soon will open a new plant to manufacture and bottle a soft drink. The plant is modern, well constructed, and located on an acreage bordering the city of Teheran. Self-contained power and water facilities will be more than ample for the soft drink operation. The contract permits its owner to process only the franchised, soft drink in this plant. However, additional buildings for other purposes can be built within the compound and supplied by the existing power and water facilities. The owner expressed great interest in the construction of a plant primarily for the manufacture of ice cream.

In addition to ice cream, mast and recombined milk could be manufactured from nonfat dry milk solids and anhydrous milk fat. Although a large market for fluid milk does not exist, a high-quality recombined milk would have a market among the foreign colony of approximately 30,000 in Teheran. The owner desires to associate with United States dairy interests in order to facilitate financing and to obtain managerial and technical assistance.

The recently implemented Public Law 480 program in Iran provides funds for economic development. If the Iranian Government should approve such a project, there is a possibility that financing of the plant could be facilitated through accumulated Public Law 480 local currency.

Export suppliers

Countries which were the leading exporters of dairy products to Iran in 1954-1955 (Iranian year 1333) were: 5/

Product and Source	Pounds
Preserved milk and cream in powder or condensed with or without sugar	
Netherlands	337,000
United States	229,000
Switzerland	183,000
Denmark	88,000
United Kingdom	42,000
Sweden	4,000
Germany	4,000
Australia	2,000
Butter, Ghee	
United Kingdom	11,766
United States	1,896
Pakistan	622

Although the Netherlands did not appear as an exporter of ghee to Iran on the 1954-55 report, Dutch vegetable oil ghee in cans was observed in several stores. For seven months in 1953, the Dutch export of vegetable and animal oil to Iran was reported as 9,782 pounds.

BURMA

Dairying and dairy processing on a commercial scale is just beginning in Burma. The per-capita availability of milk and dairy products in Rangoon and other cities is very small. Outside Rangoon the Burmese government

5/ Information supplied by U.S. Agricultural Attache.

operates a dairy farm and a sterilizing plant. At present, the plant bottles 8,000 10-ounce bottles of milk a day. Batch sterilization is used. The bottle used resembles a soft drink bottle with a crown cork closure. The output of the plant has been retailed in the Rangoon area since September 1955, and the present retail price is approximately 10½ cents per bottle. The product observed showed high heat treatment and apparent protein destabilization. However, from reports, it is highly acceptable on the retail market and all that is produced is readily sold.

There is one small pasteurization plant operating in Rangoon. Between 150 and 200 gallons of milk are bottled daily. This milk retails for approximately 45 cents for an imperial quart, 25 cents for an imperial pint, and 14 cents for an imperial half-pint. This plant also manufactures about 15 gallons of "ice cream" a day. This retails at 14 cents for a 3-ounce cup. The "ice cream" mix is not homogenized, but by the use of a piece of equipment called a "pasteurized-emulsifier" with a high-speed agitator a degree of emulsification is claimed.

At Maymyo, about 40 miles from Mandalay, the Industrial Development Corporation of the Burmese government has built a condensed milk plant with a capacity to handle 800 gallons of milk in eight hours. At present there appears to be difficulty in obtaining sufficient milk to assure an economic operating volume for the plant.

Possibility of Supplemental Supply

With active government participation in the dairy business in the Rangoon sterilization plant and the condensing plant at Maymyo, it does not appear that a new recombining operation with foreign investment would be acceptable. However, there does appear to be an opportunity for the utilization of United States nonfat dry milk solids and anhydrous milk fat as a supplemental supply.

The sterilization plant is at present utilizing all milk available apparently without satisfying the demand. The output of sterilized milk could be increased by adding recombined milk to the normal supply. The Rangoon dairy apparently could sell a small additional amount of milk at the present high prices. Its sales definitely could be expanded with lower retail prices, and a supplemental recombining operation could increase the supply at possibly a lower retail price.

With improved manufacturing procedures and the use of nonfat dry milk solids and anhydrous milk fat to increase the amount of ice cream manufactured, the ice cream market could definitely be expanded. Some type of managerial and technical assistance from United States industry might be favorably considered by Burmese officials.

Export Suppliers

Countries which were the leading exporters of dairy products to Burma during the first 6 months of 1955 were: 6/

Product and Source	Pounds
Evaporated milk	
Netherlands	2,447,984
Sweden	119,952
Condensed milk sweetened	
Denmark	3,297,056
Netherlands	9,419,088
United Kingdom	210,000
Australia	105,056
Evaporated or condensed cream	
Denmark	896
Netherlands	672
Australia	31,808
Dried milk for infants	
Denmark	318,640
Ireland	14,560
Netherlands	53,200
United Kingdom	318,528
Milk cream dried	
Denmark	224
Netherlands	11,984
Australia	4,928
Dried Milk	
Netherlands	20,384
United Kingdom	2,240
Australia	29,568
Butter	
Denmark	16,016
Netherlands	560
United Kingdom	112
Australia	48,272
New Zealand	9,744
Ghee and vegetable ghee	
Australia	1,456

6/ Information supplied by U.S. Agricultural Attache.

Product and Source	Pounds
Cheese	
Denmark	1,568
Netherlands	1,904
Switzerland	672
Malaya	112
Australia	19,264

Import Duties 7/

Product	Standard rate of duty	Preferential rate United Kingdom	Preferential rate India or Pakistan
Butter, cheese and ghee	30% ad valorem		15% ad valorem
Milk condensed or preserved, including milk cream	35% ad valorem	27% ad valorem	20% ad valorem
Milk food for infants and invalids (wholly or mainly milk)	25% ad valorem		10% ad valorem

In addition to the import duties, import licenses are required.

INDONESIA

The per-capita availability of milk in Indonesia is very low. Indonesian sources have estimated consumption to be as low as 2.8 kilograms per capita per year. The capital city of Djakarta, with a population of approximately 3,000,000, has an estimated raw milk supply of 5,000 liters per day. This small supply retails for approximately 15 to 18 cents (free rate of exchange) per liter. A small quantity of "ice cream" is made in stores. There are no dairy products manufacturing plants in Djakarta.

New Plant Possibility

Officials in the government Ministries have an understanding of the value of increasing the quantities of dairy products in the diets of the people and appeared to have a great desire to see a pasteurization plant established. Indonesia has a Public Law 480 program. Under this program, by supplemental agreement, United States nonfat dry milk solids and anhydrous milk fat could be obtained for a recombining operation. It is believed that local currency funds accruing from Public Law 480 sales would be made available to assist in the establishment of a pasteurization plant.

7/ Information supplied by U.S. Agricultural Attache.

There appears to be an opportunity for managerial and technical assistance from the United States industry for the operation of a government plant or, under proper conditions, private investment may be possible. A favorable atmosphere definitely exists and ice cream and milk consumption could be greatly expanded by the establishment of a plant.

Export Suppliers

Leading exporters of dairy products to Indonesia January-November 1955 were: 8/

Product and Source	Pounds
Sweetened condensed milk	
Netherlands	18,007,000
West Germany	110,000
Czechoslovakia	88,000
Switzerland	60,000
Denmark	5,249,000
Singapore	11,000
Australia	309,000
Unsweetened condensed milk	
Netherlands	2,617,000
Denmark	128,000
Singapore	37,000
England	20,000
Sweetened skimmed condensed milk	
Australia	57,000
Sterilized milk	
Switzerland	187,000
Other milks (including infant food)	
Netherlands	2,634,000
Denmark	2,006,000
Australia	765,000
England	46,000
Canada	37,000
United States	836,000
Cheese	
Netherlands	397,000
West Germany	7,000
Switzerland	7,000
Denmark	9,000
Singapore	2,000
Australia	40,000
United States	2,000

8/ Information supplied by U.S. Agricultural Attache.

Product and Source	Pounds
Butter (Natural and Artificial)	
Netherlands	51,000
Australia	333,000

Import Duties 9/

Product	Duty
Butter	200%
Cheese	100%
Dry Powdered Milk	50%
Condensed and Evaporated	100%

All imports require an import license.

The principal imported item, sweetened condensed milk, is reported to be retailing for approximately 16.5 cents per 14-ounce can.

PHILIPPINE REPUBLIC

It will continue to be necessary to supplement the normal milk supply with recombined milk and dairy products in the Philippine Republic if the per-capita availability and the overall consumption of milk and milk products is to be increased.

However, the use of high-quality coconut oil is encouraged by the Philippine government as the source of fat for supplemental programs because of its availability. When coconut oil is combined with nonfat dry milk solids to produce a fluid filled milk, the resulting product has a distinct and different flavor from fresh cow's milk or recombined milk utilizing nonfat dry milk solids and anhydrous milk fat. However, the filled milk would be an acceptable product to a consumer not accustomed to cow's milk. Thus, where a supply of high-quality coconut oil is locally available, an acceptable filled milk can be made available to the people of the country at a lower price than milk utilizing milk fat.

Present Milk Supply in Manila

Manila, with a population of approximately 1,200,000, has a low per-capita milk supply. The bottled, pasteurized milk available has been supplied mainly by one plant which markets 800 to 1,000 gallons of milk a day, utilizing a fresh milk supply and a recombined product made from nonfat dry milk solids and anhydrous milk fat. A dairy plant recently began operation that is marketing about 800 gallons per day of a filled

9/ Information supplied by U.S. Agricultural Attache.

milk utilizing coconut fat. Most of the milk from this plant is dispensed from bulk dispensers at 5 cents for a 6-ounce cup. The bottled, filled milk retails for 50 cents a quart with bottle deposit. Recombined milk utilizing anhydrous milk fat retails at 70 cents a quart with bottle deposit. The price of pasteurized milk is as high as 85 cents a quart in stores. The average industrial wage for the Manila area has been estimated from a low of $2.00 to a high of $4.00 per day. The low average industrial wage plus the present high retail price for fluid milk would appear to limit increased milk consumption.

The plant producing filled fluid milk is also manufacturing a small quantity of filled "ice cream" mix utilizing coconut fat. This plant has also experimentally produced a filled sweetened condensed milk from nonfat dry milk solids and coconut fat and within the near future plans production for commercial sale of this product in bulk.

Proposed New Operation

It was generally reported that United States dairy interests are endeavoring to establish a filled evaporated milk operation in Manila. The proposed operation would utilize Philippine produced coconut oil and probably United States nonfat dry milk solids. Such a project, utilizing Philippine raw material, and establishing a new Philippine industry will, from all indications, be established and successful.

Present Philippine Supply of Dairy Products

By far the major dairy product imported into the Philippine Republic is evaporated milk. The United States continues to be the major supplier of this product, and during the first 8 months of 1955 supplied 74 per cent of the total dairy product import. The second largest supplier is the Netherlands. The Dutch supplied practically 100 per cent of the sweetened condensed milk imported during the first 8 months of 1955.

The anticipated establishment of a filled condensed milk industry, both evaporated and sweetened, will definitely affect the import pattern of dairy products into the Republic in future years.

Retail Prices

Retail prices observed in super markets for dairy products were: Dry whole milk, U.S., 1-pound, 62½ cents to $1.00, 2½-pounds, $1.82 to $2.40, 5-pounds, $4.12 to $4.75; Dutch, ½-pound, 50 cents, 1-pound, 87½ cents, 2½-pounds, $2.13; Australia, 3/4-pound, 67½ cents; Swedish, 5-pound, $3.50. Evaporated milk, U.S., 17½ to 18 cents per can; Dutch, 16 to 17 cents per can; Swedish, 16 cents per can. Sweetened condensed milk, Dutch 14-ounce can, 19 to 25 cents; Swiss, 14-ounce can, 27½ cents. Sterilized whole milk, U.S., 3 quarts, $1.40, 1 quart, 50 cents, 8 ounces, 15 cents. Nonfat dry milk solids, U.S., 1-pound (only one brand noted) 80 cents.

- - - - - - - - - -

NOTE: More detailed information with reference to dairy product business opportunities for United States marketers in the Near and Middle East will be supplied upon request by the Dairy and Poultry Division, Foreign Agricultural Service, U. S. Department of Agriculture.

943
117
p. 2

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D.C.

JUN 8
U.S. DEPT.

FD 2-56 April 2, 1956

World Output of Dairy Products, Fourth Quarter, and Annual, 1955

Fourth Quarter:

Over-all factory outturn of dairy products in the fourth quarter of 1955 was higher than output for the same quarter of 1954 in spite of poor conditions for milk production in some of the important dairy countries. Butter, canned milk and dried milk production showed a gain over the earlier year, while cheese production fell only slightly below the 1954 level.

Conditions for milk production were favorable in Australia in the October-December quarter. Abundant feed was available in most of the important dairying areas and stock was in good to prime condition. Reports from New Zealand indicate that pastures during the quarter were generally good and butterfat production was higher than a year ago. In some countries of Western Europe, milk production was hampered by the slow recovery from the long dry spell. Generally favorable conditions prevailed in Canada, particularly in the dairy Provinces, and milk production for the country as a whole during the quarter rose above that of comparable 1954. In the United States, despite the cold weather in some sections, milk production was higher than a year ago.

Butter production in factories increased about 3 percent in the final quarter of 1955, compared with the same quarter of 1954. Output in Australia, higher than a year ago, may be attributed both to the larger milk production in this quarter and the continuation of the shift in the utilization of supplies from cheese to butter manufacture. In New Zealand, shifts in production also were evident, resulting in a rise in butter output in the fourth quarter of 1955 over the same quarter of the preceding year.

Production of butter in Denmark, the Netherlands, Sweden, Norway and the United Kingdom dropped below the 1954 level. With supplies to creameries in Ireland ample during the fourth quarter, butter production showed a considerable gain over the earlier year. The higher milk production in Canada and the United States was reflected in increased butter output.

A summary of this information was published in the March 26, 1956 issue of Foreign Crops and Markets.

FACTORY DAIRY PRODUCTS: Output in principal producing and exporting countries, 4th quarter (calendar) 1955, with comparisons

Country and Product	Average 1934-38	Average 1946-50	Total 1954	Total 1955	1954 4th Quarter	1955 1st Quarter	1955 2nd Quarter	1955 3rd Quarter	1955 4th Quarter	Fourth Quarter 1955/1954
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	Percent
BUTTER										
Canada	1/ 254,774	277,868	2/ 315,211	319,688	2/ 55,860	2/ 34,313	2/ 106,745	2/ 117,103	61,527	110
United States	1,705,240	1,301,830	1,448,688	1,382,400	276,504	2/ 332,800	2/ 440,990	2/ 318,945	289,665	105
Belgium	46,179	55,353	97,779	-	20,020	-	-	-	-	-
Denmark	400,660	318,697	2/ 399,033	363,759	80,909	78,263	109,128	2/ 97,884	78,484	97
Finland	61,287	3/ 61,215	2/ 112,505	-	2/ 21,153	2/ 21,380	30,995	31,477	-	-
France 4/	529,000	390,471	551,000	5/ 551,000	-	-	-	-	-	-
Republic of Germany	6/7/ 560,000	492,188	668,329	-	138,557	134,968	187,611	178,326	-	-
Ireland	89,400	68,648	88,005	84,153	14,370	3,977	27,462	35,887	16,827	117
Netherlands	201,000	155,620	179,662	161,390	42,820	25,751	56,557	44,607	34,475	80
Norway	24,930	20,049	22,882	23,162	2,840	2/ 4,640	9,751	6,047	2,724	96
Sweden	152,769	216,442	204,095	185,595	38,896	37,805	56,252	55,207	36,331	93
Switzerland 4/	57,760	36,949	8/ 65,036	-	10,148	11,775	17,516	-	-	-
United Kingdom	44,200	23,529	2/ 51,072	33,152	2/ 5,600	4,928	2/ 18,144	6,720	3,360	60
Argentina	65,742	100,657	133,969	125,662	-	-	-	-	-	-
Union of So. Africa	9/ 27,725	44,845	73,470	-	19,192	25,432	17,340	-	-	-
Australia	7/ 415,250	354,371	397,775	5/ 446,945	2/ 160,426	118,684	65,966	89,515	5/ 172,780	108
New Zealand	7/ 366,912	346,095	2/ 408,128	427,415	2/ 178,618	2/ 123,962	2/ 34,541	2/ 82,387	186,525	104
CHEESE										
Canada	1/ 119,924	114,329	2/ 85,348	79,238	2/ 14,833	2/ 6,330	2/ 27,361	2/ 30,925	14,622	99
United States	643,234	1,156,005	1,383,104	1,353,415	265,279	2/ 294,200	2/ 447,045	2/ 342,810	269,360	102
Denmark	68,820	123,634	178,352	192,902	33,951	37,919	63,272	56,659	35,052	103
France 10/	5/ 584,000	11/ 424,070	714,000	5/ 715,000	-	-	-	-	-	-
Italy 10/	523,513	491,326	741,848	-	-	-	-	-	-	-
Netherlands	5/ 200,000	176,926	326,503	348,327	87,623	51,800	119,562	79,153	97,812	112
Norway 12/	39,067	35,564	65,792	63,552	9,746	2/ 13,161	22,706	17,255	10,430	107
Sweden	76,059	115,005	121,845	119,275	19,437	21,032	41,654	35,225	21,364	110
Switzerland 12/	111,729	107,232	8/ 121,032	-	22,308	18,915	37,429	-	-	-
United Kingdom 4/	109,000	69,888	182,784	141,120	22,848	2/ 28,672	2/ 60,480	29,568	22,400	98
Argentina	67,873	203,830	239,420	275,575	-	-	-	-	-	-
Union of So. Africa	9/ 10,195	17,967	27,085	-	7,074	7,732	2/ 5,648	-	-	-
Australia	7/ 48,400	98,396	107,229	5/ 88,185	42,974	20,747	11,335	21,773	5/ 34,330	80
New Zealand	7/ 210,911	216,842	2/ 237,373	212,195	2/ 103,600	2/ 66,976	2/ 18,749	2/ 32,883	93,587	90

CANNED MILK																		
Canada 13/	1/	104,335		266,532	2/	308,529		320,504		53,801	2/	50,599	2/	105,421	2/	104,751		59,769		111
United States 14/		1,970,189		3,170,576		2,559,444		2,616,505		469,189		576,650		891,265		677,265		471,325		101
Cuba	15/	32,564		36,655		56,196		-		17,094		-		-		-		-		-
Denmark		40,785		58,701		-		-		-		-		-		-		-		-
France	16/	28,953	15/	57,984		127,867		-		-		-		-		-		-		-
Netherlands		309,952		181,222		511,250		592,028		147,888		112,399		167,697		125,974		185,958		126
Switzerland		14,198		13,031		-		-		-		-		-		-		-		-
United Kingdom		378,560		219,914		258,496		362,432		53,088		69,664		159,936		75,264		57,568		108
Argentina	17/	3,159	15/	11,914		19,209		25,573		-		-		-		-		-		-
Australia	7/	41,894		132,745		115,522	5/	121,600	2/	47,358		27,967		12,195		26,237	5/	55,201		117
New Zealand	15/	11,273		-		-		-		-		-		-		-		-		-
DRIED MILK 18/																				
Canada	1/	26,079		70,876	2/	100,377		106,153		16,775	2/	18,131	2/	36,261	2/	33,964		22,797		136
United States	15/	203,555		913,436		1,496,248		1,587,820		266,980	2/	370,900	2/	561,975	2/	339,570		315,375		118
Belgium		5,500		6,607		34,513		-		3,880		-		-		-		-		-
Denmark		2,205		16,866		-		-		-		-		-		-		-		-
France	16/	7,685	15/	3,308		35,274		-		-		-		-		-		-		-
Netherlands		56,438		54,468		130,673		120,912		14,095		10,318		61,473		38,472		10,649		76
Sweden		1,351		24,566		25,862		-		3,623		4,118		8,889		6,758		-		-
Switzerland		7,187		10,847		-		-		-		-		-		-		-		-
United Kingdom		43,098		73,848		110,432		99,232		17,248	2/	16,800		46,592		18,816		17,024		99
Argentina	17/	3,977	15/	14,070		21,025		22,707		-		-		-		-		-		-
Australia	7/	16,971		54,235		85,474	5/	96,760	2/	35,909		22,073		7,971		20,793	5/	45,923		128
New Zealand	19/	17,429		-		-		-		-		-		-		-		-		-

1/ Average 1935-39. 2/ Revised. 3/ Average 1948-50. 4/ Total production. 5/ Estimated. 6/ Average 1935-38. 7/ Production year ending June 30. 8/ Annual production figures more complete than monthly figures used in quarterly data. 9/ Production year ending August 31. 10/ Total cheese, and includes cheese made from the milk of sheep and goats. 11/ For 1948. 12/ Total cheese, and includes cheese made from the milk of goats. 13/ Both bulk and case goods. 14/ Evaporated whole and condensed whole case goods only. (Estimates of bulk types discontinued). 15/ Less than a 5-year average. 16/ For 1937. 17/ For 1939. 18/ Total dried whole milk and dried skim milk for human consumption. 19/ For 1938.

Foreign Agricultural Service. Prepared or estimated from official statistics, reports of Agricultural Attaches and other U.S. Representatives abroad and other information. - March 26, 1956.

Factory cheese production in the fourth quarter was just below that for the same quarter a year ago. Output in both Australia and New Zealand, down considerably from last year, was due to the smaller milk supplies made available for the manufacture of this product. Production in the Netherlands, Sweden, Norway and Denmark ran well ahead of the earlier year, but in the United Kingdom showed a marked decline. Output in Canada was down slightly, but in the United States, it was somewhat above that of the previous year.

Canned milk production in the closing quarter of 1955 increased 8 percent over the corresponding quarter of 1954. Throughout the period, more milk was used for condensed milk in Australia than a year ago. In the United Kingdom, larger quantities of milk were made available for processing and canned milk production was up. Output also was heavier in the Netherlands. Total canned milk production in Canada was well above last year; in the United States, a slight gain in output occurred.

Dried milk production in the final quarter of 1955 increased 17 percent over comparable 1954. In Australia, both dried whole milk and non-fat dry milk solids output were above a year earlier. Production in the Netherlands was down, due to the sharp decline in the processing of dried whole milk. Heavier production of non-fat dry milk solids in Canada during the quarter raised total dried milk production well above the 1954 level. Overall dried milk output in the United States was higher in the fourth quarter of 1955 than in the corresponding quarter of 1954.

Annual:

Over-all production of dairy products in 1955 was only slightly above 1954. Seasonal conditions in Australia's dairying districts were extremely favorable. Well above average rainfall was recorded in almost all areas, pastures were excellent, and, although dairy cow numbers were practically unchanged from a year earlier, milk production showed a sharp increase. In New Zealand, production was somewhat higher, despite the unusually variable weather experienced during the year.

Production in many countries of Western Europe was curtailed by the hot, dry weather in mid-summer. In Denmark, cow numbers showed a downward trend and yield per cow was reduced by the effect of the unfavorable conditions and poor pastures. Milk production in the Netherlands and Sweden was below the level of 1954. In France, where dairy cow numbers and milk production have been increasing steadily for the past several years, the upward trend in production was temporarily halted in 1955 due to the severe drought in Normandy and Brittany. Milk production in Norway was somewhat above last year despite the summer dry spell, average yield per cow being higher, due to the improvement in the milk producing capacity of the herds and to better feeding methods. In the United Kingdom and Ireland, milk production was affected by feed shortages early in the year and by drought in mid-summer.

Milk production in Canada in 1955 was slightly above 1954, due to a rise in milk cow numbers; production would have been higher except for the severe drought in Quebec and Ontario. Total milk production in the United States reached an all time high in 1955. Although there was a slight drop in milk cow numbers, yield per cow was greater than that of an earlier year as the result of liberal concentrate feeding and improved busbandry practices.

Butter production (in factories) in 1955 declined 2 percent below the 1954 level. In Australia, butter production was higher than a year ago, most of the increase in whole milk production being directed into butter. Larger output in New Zealand was primarily attributed to shifts in utilization. Norway reported slightly more butter in 1955, while France reported practically no change from the earlier year.

Supplies to butter factories in Denmark were much smaller in 1955 and butter production declined. The quantity of milk available for manufacturing in the United Kingdom was appreciably smaller than in the previous year, in addition to which utilization in 1955 changed markedly, and butter factories received much less milk than in 1954. Other Western European countries in which butter production in 1955 was less than a year ago were the Netherlands, Sweden and Ireland.

In Canada, the slightly higher milk production was reflected in higher butter production. Less milk was available for manufacturing in the United States and output of butter declined.

Compared with 1954, cheese production in 1955 dropped 2 percent. In Australia, marketing difficulties and lower returns for cheese caused production to continue the downward trend which became evident in 1954. Shifts of milk supplies to butter reduced cheese output in New Zealand.

Production of cheese was up in Denmark and the Netherlands where somewhat greater quantities of milk were used for cheese. In Argentina, production in 1955 reached an all-time high. Cheese output in the United Kingdom was down, due largely to utilization shifts. Norway and Sweden also reported decreases in production in 1955.

In Canada and the United States, the amounts of milk directed into cheese manufacture were somewhat smaller than in the earlier year.

Production of canned milk (evaporated and condensed) in 1955 was 7 percent above 1954 and showed the largest gain for any of the four major dairy products. Much larger supplies of manufacturing milk were made available for condensed and evaporated production in the Netherlands and the United Kingdom. Heavier output of evaporated whole milk in Canada offset the declines in other types and overall production of canned milk was above the 1954 level. In the United States, production of both condensed and evaporated milk in 1955 increased over the previous year.

Total dried milk production showed a gain of 5 percent in 1955, compared with 1954. In Australia, increased output of non-fat dry milk solids offset the decline in dried whole milk and overall dried milk production was up. In the Netherlands and the United Kingdom, output of dried whole milk was larger than a year ago, but, due to the smaller availability of skim milk from butter, production of non-fat dry milk solids dropped sharply.

Output of dried milk in Canada was higher in 1955 when increased domestic demand for non-fat dry milk solids resulted in higher output, and a rise in whole milk powder reflected a record level of exports. Total dried milk production in the United States for calendar 1955 ran ahead of the previous year's output, with that for non-fat dry milk solids the highest on record.

Current Conditions Abroad:

Australia: While there were heavy rains in Queensland and New South Wales recently, the losses in the dairying districts were of little or no consequence.

New Zealand: Reports indicate that production conditions remain favorable in most dairying areas. Rainfall has been well spread but further falls would be welcomed in parts of North Island and over most of South Island.

Argentina: Recent rainfalls have cleared up the drought conditions of December.

Europe: Unusually severe weather conditions in the first quarter of 1956 caused an abnormally high winter-kill of fall sown grains in much of Western Europe; continued cold weather also hampered re-seeding and some areas reporting extensive damage may find it impossible to replant. Pastures were generally retarded throughout Western Europe. In Eastern Europe, snow acted as a general protective covering.

Canada: The Canadian Department of Agriculture expects the upward trend in cow numbers and milk production to continue.

43
7
2

FOREIGN AGRICULTURE CIRCULAR

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREIGN AGRICULTURAL SERVICE
WASHINGTON, D.C.

JUN 3 - 1963
U. S. DEPARTMENT OF AGRICULTURE

FD-1-56 March 12, 1956

THE WORLD TRADE OF THE PRINCIPAL DAIRY SUPPLYING COUNTRIES, 1953-1954

Terrence W. McCabe and William L. Scholz 1/

World trade by the principal exporters of dairy products showed a decline in butter, cheese, and canned milk in 1954 compared with 1953. The decreases were, butter 2 percent; cheese 0.5 percent; and canned milk 5 percent. Exports from the principal dried milk suppliers showed a 3 percent rise over the previous year.

While New Zealand showed substantial reductions in all dairy product exports, it continued to be the number one butter and cheese supplier in 1954. The Netherlands retained its leading position as a canned milk exporter, shipping more than 3-1/2 times the 133 million pounds of the second place United States. The United States continued to hold its first place ranking as a dried milk exporter, although the great bulk of the United States' exports were in the form of shipments by UNICEF for relief purposes. If only commercial shipments were considered, the United States would drop to third place, behind New Zealand and the Netherlands as an exporter of dried milk products.

The year 1954 saw the United Kingdom become a net exporter of canned milk, increasing its export trade by more than 14 times the 1953 figure. Finland, a butter importer in 1953 turned exporter in 1954 to the extent of 7 million pounds. The volume of dairy products leaving Canadian ports showed a marked decline in 1954 and in all items except dried milk, Canada occupied last place among the major exporters.

Butter

In spite of the fact that France, Denmark, Argentina, the Union of South Africa, Australia, and the United States increased their exports of butter in 1954, and that Finland entered the market, the 34 million pound increase in trade from these sources was more than offset by the decline of 59 million pounds in export sales by New Zealand between 1953 and 1954. Smaller declines by Canada, the Netherlands, and Sweden also contributed to

1/ Agricultural Economists, Dairy and Poultry Division, Foreign Agricultural Service, U. S. Department of Agriculture.

the reduction of 15.5 million pounds in total butter exports in 1954, about 2 percent under the previous year. (See Table I).

The United Kingdom continued to be the world's primary importer of butter. Although takings by the United Kingdom dropped 17 million pounds between 1953 and 1954 to 624 million pounds, they represent more than two-thirds of the world's trade in butter. New Zealand was the principal loser of the United Kingdom trade, losing almost 60 million pounds during the year. However, despite this hugh decline, New Zealand maintained its premier position as supplier to the United Kingdom market. Similarly the loss of 7 million pounds by Denmark in shipments to the United Kingdom did not disturb its second place ranking. Together New Zealand and Denmark do over three-quarters of the export trade in butter to the United Kingdom.

Takings by other Western Europe show the largest absolute and relative loss; the 71.2 million pounds of butter shown as exports to Western Europe in 1954 represented a decline of more than 30 percent from the previous year's shipments to that area and Western Europe accounted for less than 8 percent of total imports. The primary reason for the decline in takings by other Western Europe was France's becoming a net exporter of butter in 1954 whereas in 1953 it had been a considerable net importer.

Belgium also dropped 12 million pounds in butter imports from primary suppliers between 1953 and 1954, Switzerland was down 8 million pounds and Italy down 4 million pounds under 1953. Finland, by turning to the export of butter, ceased its import program entirely and thus another 3 million pounds were taken from other Western European imports. The Netherlands remained the leading supplier of this area.

Eastern Europe's increase of 34 million pounds was due largely to a diversion of 31.7 million pounds of New Zealand butter from the United Kingdom to the U.S.S.R., Czechoslovakia, and Eastern Germany. Of the approximately 141 million pounds imported by Eastern Europe from the major suppliers, 66.5 million pounds were taken by U.S.S.R. The largest supplier of butter in both years was the Netherlands, with Denmark second. These two countries supplied 46 percent of the total butter shipped to this area by the major suppliers. The United States played a minor role by shipping 110 thousand pounds to Eastern Germany in 1954 under the Danube Flood Relief Program.

Africa was the fourth largest butter market for the 11 major exporters and increased its takings from 25 million pounds in 1953 to almost 28 million pounds in 1954. Algeria, the Belgian Congo, Egypt, French Morocco, French West Africa, and Northern and Southern Rhodesia accounted for over three-fourths of the African market. The largest increase among these countries was a 1.5 million pound increase in butter entering Algerian ports. The Netherlands and Denmark supplied about 50 percent of the butter imported by Africa in 1953 and 1954.

Asia cut its imports by 2.7 million pounds in 1954 but remained in fifth place as a world butter market. India and Japan are the main Asian importers; each took over 3 million pounds in 1954, although Japan halved its butter imports from the previous year. Australia supplied over 50 percent of the 21 million pounds of butter entering Asia in 1954. The United States supplied about 0.5 million pounds of butter to Asia, most of it going to the Philippines.

North America continued to occupy sixth place as a butter purchaser although it dropped 3 million pounds from the 18 million it took in 1953. The United States bought almost 5 million pounds, almost all from Denmark for use of troops in Germany, and the British West Indies bought over 4 million pounds from New Zealand in 1954.

Denmark was the principal butter supplier to North America in 1953 but a drop of 2.5 million pounds seen here in 1954 put New Zealand in first place. The United States supplied only 4 percent of the butter imported by its neighbors.

An increase of 4.5 million pounds of butter brought in at South American ports did not change this continent's position from seventh place as a butter importer in 1954. Chile and Peru take over 80 percent of the butter imported by South America and an increase in their intake in 1954 accounted for the over-all South American rise. Argentina is the largest supplier to its neighbors. The United States increased its exports to South America by 10 times the 1953 figure but accounted for only a small part of the total marketed there.

The islands of Oceania are a small butter market. In 1954 they doubled their takings to slightly over 2 million pounds. New Zealand and Australia dominate the scene as major suppliers.

Cheese

Thirteen countries made up the roll of major cheese suppliers of the world in 1953 and 1954 and accounted for exports of 790 and 786 million pounds respectively. The decline was due largely to a 20 million pound decrease of cheese exports from New Zealand and an 11 million pound decrease in Canadian exports which were not fully compensated for by increased sales of other exporters. (See Table II).

In spite of the decrease, New Zealand remained the leading cheese exporter in 1954. The Netherlands increased its shipments by 13 million pounds to 203 million pounds in 1954, only 3 million pounds below New Zealand. Denmark in third place and Australia in fourth place as exporters, showed little change between the two years. Switzerland increased its exports by 7 million pounds, but remained in fifth place. An increase of 4 million pounds exported during 1954 allowed France to capture sixth place from Italy, which had to be content with seventh place. Finland was the eighth largest cheese exporter in both years. Western Germany supplied almost 5 million

more pounds of cheese to the world in 1954 than in 1953 and took over ninth place as a major supplier, from the twelfth position it held in 1953. Sweden, Argentina, and the United States followed in that order and Canada dropped from its ninth ranking in 1953 to last place in 1954.

Other Western Europe captured the leading cheese import position, formerly occupied by the United Kingdom, by importing over 303 million pounds in 1954, a 5 percent rise over the previous year. The Republic of Germany increased its takings by 4 million pounds in 1954 by taking more Swiss and Dutch cheese. Belgium imported 5 million more pounds in 1954 than in 1953. Two of the world's largest cheese exporters, Italy and France, increased their imports by 2 million and 4 million pounds respectively; Italy imported more cheese than it exported during 1953 and 1954. The Netherlands was the largest supplier to its neighbors and enjoyed a 16.5 million pound export increase in 1954.

The United Kingdom, second largest cheese importer, decreased its cheese intake to 287 million pounds in 1954, a 13 percent drop from 1953. Australia was the only major exporter to the United Kingdom which showed heavier shipments in 1954 than in 1953. New Zealand continued to supply the bulk of British cheese imports but decreased its shipments by 16.6 million pounds in 1954.

North America was the third largest cheese market in both years. The quota on cow's milk cheese imports notwithstanding, the United States took 48 of the 78 million pounds brought in during 1954, most of it in specialty type cheeses. The large suppliers were Italy at 22 million pounds, Switzerland at 13 million pounds and the Netherlands at 9 million pounds. The United States also shipped over 40 percent of its total cheese exports to its North American neighbors, but only supplied 3 percent of the amount brought into that area in both 1953 and 1954.

Africa was the fourth largest cheese importing area in 1953 and 1954, taking 51 million pounds and 50 million pounds in each year respectively. France supplied about one-half of Africa's annual imports which went to Algeria, French Morocco, French Guinea and Tunisia. Egypt decreased its cheese imports by 1.5 million pounds in 1954 primarily by buying less imports from the Netherlands.

Eastern Europe's cheese imports increased from 17 million pounds in 1953 to 37 million pounds in 1954 due to larger takings by the U.S.S.R. and Eastern Germany. Finland and Denmark were the large suppliers to this area. Finland became the major cheese supplier in Eastern Europe in 1954 by increasing its exports to 60 million pounds, 5 times the 1953 figure.

Asia, South America and Oceania followed in that order as world cheese markets. All showed increases in their takings but still remained minor markets. Asia's increase of 1 million pounds was due to the Philippines and Indochina each increasing their imports by 0.5 million pounds. Australian cheese was most prominent on Asian markets in 1953 and 1954.

Total cheese shipped by the major exporters to South America rose from 10.6 million pounds in 1953 to 12.6 million pounds in 1954. Venezuela, the largest South American cheese importer, decreased its takings by 1 million pounds but Dutch Guiana took 6 times the 0.5 million pounds it took in 1953. The Netherlands supplied over one-half the South American requirements.

Oceania almost tripled its cheese imports in 1954. Although 0.5 million pounds of Finnish cheese found its way to Australian New Guinea in 1954, Oceania remained a market supplied principally by Australia and New Zealand.

Canned Milk

Exports of canned milk declined 5 percent between 1953 and 1954. Of the major exporters of canned milk, the Netherlands, Switzerland, the United Kingdom, and France increased their exports in 1954, but reductions in shipments from the United States, Canada, Australia, New Zealand and Denmark resulted in an over-all decrease of 42 million pounds of canned milk trade in 1954. The decline was fairly general, with only the Asian area showing an increase. The decline in export business occurred primarily as a result of reduced takings in Western Europe and the fact that in 1954 the United Kingdom became a net exporter of canned milk products whereas previously it had been a net importer. (See Table III).

The Netherlands, the leading exporter, supplied 57 percent of the total canned milk marketed by the major exporters in 1954. The United States retained its second place among the major suppliers but showed a decline of 18 million pounds under the 1953 figure. This drop was due almost entirely to the disappearance of the American product from the sweetened condensed milk markets. Third place was occupied by Denmark, but a decrease of 27 million pounds made its position less secure than it was in 1953. The United Kingdom boosted its exports of canned milk from 4 million pounds in 1953 to 52 million pounds in 1954 and became the fourth largest exporter of canned milk rising from ninth place which it held in 1953. This change, plus a decline of 32 million pounds leaving Australian ports, dropped Australia from fourth place in 1953 to fifth position in 1954. An increase of 3 million pounds was not enough to retain fifth place and France dropped to sixth. New Zealand suffered a 10.5 million pound decrease and followed France. Switzerland showed a slight gain of 1.5 million pounds but remained in eighth place. Canada's 8 million pounds of canned milk exported in 1954 represented a 57 percent decline from 1953 and dropped Canada from seventh to last place among the major suppliers.

Asia, the major canned milk importer in 1953, firmed this position in 1954 by increasing its imports to 511.5 million pounds, 12 percent over the 1953 figure. This area takes 63 percent of the canned milk exported by the major suppliers. Investigation showed that the Philippines, largest Asian importer of canned milk, increased its intake by 19 million pounds over the previous year. 98 percent of the 97 million pounds of canned milk sent by the United States to Asia went to the Philippines.

British Malaya decreased its imports slightly but substantial rises in Singapore, Burma, India, Indochina, Indonesia, and Thailand helped account for Asia's over-all increase.

The Dutch increased their export of canned milk to Asia by 34 million pounds in 1953 and their shipments of 231 million pounds during the year represented more than 50 percent of all shipments to Asia. The United States also found a new but small Asian market in Formosa. A significant event was the advent of the United Kingdom into Asian trade. In its first year as an exporter of canned milk products, the United Kingdom shipped more than one-half its exports to Asian countries and supplied about 6 percent of total receipts; most of the shipments were directed to Singapore and Malaya.

Although shipments to Africa declined in 1954 from the 1953 level that area became the second largest importing area in 1954. An increase in shipments to Africa in 1954 by the United Kingdom was smaller than the over-all decrease in shipments from other sources principally the Netherlands, Denmark and Australia. Africa became the second largest importing area in 1954. The decline in African trade, principally by the Netherlands, Denmark, and Australia, was greater than the increase in exports to that area by the United Kingdom.

North America became the third largest importer of canned milk in 1954. With the United States and Canada net exporters, Cuba accounted for about one-third of the total but decreased its imports from 34 million pounds to 24.5 million pounds in 1954. Trinidad, a lesser canned milk market, decreased its imports from Canada and the Netherlands but offered the United Kingdom a new market for 5 million pounds in 1954. The Netherlands, supplier of almost half the North American canned milk imports in 1953, suffered a 5 million pound loss to this market in 1954, while the United States increased its exports to her neighbors in 1954 by 4 million pounds.

The Western European market took 58 percent less canned milk from the major exporters in 1954 than 1953 and dropped from the second largest market in the world to fourth place, with New Zealand completely losing a 13 million pound market in the area. The United Kingdom, of course, registered the biggest decline and decreased its imports by 50 million pounds with Denmark, Australia, New Zealand, and Switzerland being the principal losers of this market. Belgium halved its imports from the Netherlands, resulting in a 21 million pound decrease in canned milk entering Belgian ports. West Germany decreased its imports by 9 million pounds, largely at the expense of United States shippers. Similar decreases took place at most West European ports. The United States and Australia felt a large decline and the Netherlands, while still supplying 60 million pounds of canned milk to her neighbors, was down 36 percent from 1953.

The remaining areas, South America, Oceania, and Eastern Europe took only 4 percent of the canned milk exports from the major suppliers in 1954. South America increased its imports to almost 31 million pounds,

a 4 million pound increase over 1953. Oceania decreased its receipts from Australia but the United Kingdom found a market for 1 million more pounds than it shipped in 1953. Poland, importing from Denmark in 1953, and Denmark and the Netherlands in 1954, accounted for all East European canned milk imports.

Dried Milk

Dried milk was the only dairy product to show an increase in volume of trade in 1954. The major exporters shipped 476 million pounds in 1954, a gain of 12 million pounds over the previous year. The United States dominated the scene, supplying 42 percent of the total; this represented an increase of almost 54 million pounds over the 1953 American figure. Much of this export tonnage represents shipments by UNICEF of nonfat dried milk solids purchased from Government stocks at a nominal price. Shipments from New Zealand declined 30 million pounds, but it held to second place as a dried milk exporter. The Netherlands followed at 71 million pounds, an increase of 7 million pounds over her 1953 figure. Australia occupied fourth place at 53 million pounds, a decrease of 5 million pounds. (See Table IV).

The remaining five countries accounted for only 14 percent of the total exported in 1954. Canada, although decreasing its 1953 figure by one-third, managed to hold fifth place as an exporter of this product. Belgium's increase of 1.5 million pounds did not alter her sixth position. Switzerland moved from eighth in 1953 to seventh in 1954, the spot vacated by Sweden, whose 44 percent decline put it behind eighth place United Kingdom.

Asia remained the world's largest market for dried milk in 1954, and showed a 60 million pound gain over its 1953 import figure. The United States had the lion's share of the Asian dried milk market, with 64 percent of this area's imports in 1954; Australia was in second place with only 14 percent. India which took one-third of the dried milk entering Asia in both years, increased its takings 45 million pounds in 1954; Australia supplied over one-third of this figure. Japan, which gets almost all its dried milk from the United States, increased its imports from 19 million pounds to 40 million pounds, and Korea, also supplied by the United States, increased its imports from 26 million pounds in 1953 to 32 million pounds in 1954. Israel, the third largest United States market for dried milk in Asia, showed an increase in total takings from 18.5 to 26.5 million pounds. Lesser Asian markets showed small increases, but the Philippines decreased its imports by 800,000 pounds.

In 1954 the United Kingdom took only two-thirds as much dried milk as it imported in 1953, largely due to a 33 million pound reduction in the intake from New Zealand; it remained the second leading importer, however.

South America showed a 20 million pound increase but remained in third place as a dried milk marketing area. Venezuela normally takes two-thirds of the dried milk entering South America and is supplied largely by the

United States. A 2 million pound increase in dried milk entering Venezuela in 1954, however, is attributed to increased shipments from Canada and the Netherlands. Increases of 10 million pounds to Chile and 4 million pounds to Colombia from the United States accounted for the major portion of South America's gain.

Other Western Europe decreased its dried milk imports to 54 million pounds in 1954, a drop of about 7 million pounds. Ireland practically ceased importing dried milk from the Netherlands and cut its total intake from almost 11 million pounds in 1953 to 0.4 million pounds in 1954, most of it from the United Kingdom. France, Belgium and Sweden, all net exporters, decreased their imports, but the Netherlands, third largest exporter, increased its imports by almost 4 million pounds, doubling its 1953 intake. Western Germany showed an over-all increase of 2.5 million pounds, much of it due to increased use of Swiss milk powder.

North America, the fifth largest market for dried milk in 1953 retained that position in 1954 but decreased its imports by 9 million pounds to 26 million pounds. A drop of 13 million pounds in imports by Mexico, at the expense of the United States and Canada, and a drop of 3 million pounds in imports by the United States at the expense of New Zealand, accounted for the loss. Trinidad and Jamaica were the only North American countries showing significant increases in imports; each took over 1 million pounds over its 1953 figure, largely from the Netherlands in the case of Trinidad and from the United States in the case of Jamaica.

Africa, Oceania and East Europe remained in fifth, sixth, and seventh places respectively in both years. Africa increased its imports by 2 million pounds, due largely to increased United States shipments to Egypt and the Belgian Congo, the largest African dried milk importers. Oceania showed a small gain in its takings. Fiji and New Caledonia made slight increases in purchases from Australia and New Zealand.

The Netherlands was the only exporter of any consequence, among the major exporters, to Eastern Europe. In 1953 the Dutch shipped 106,000 pounds of dried milk to Rumania and in 1954, 82,000 pounds to Bulgaria.

TABLE I. Butter: Pattern of Exports of Principal Exporting Countries by Area of Destination - 1953-1954

11 MAJOR EXPORTERS	UNITED KINGDOM		OTHER W. EUROPE		E. EUROPE		NORTH AMERICA		ASIA	
	1953	1954	1953	1954	1953	1954	1953	1954	1953	1954
	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From
United States	-	1/	-	2.1	-	0.1	1.1	3.6	0.3	2.0
% Exports to:	-	0.1	-	43.9	-	3.3	54.1	15.6	18.5	12.6
Canada	-	1/	-	-	-	-	1.1	1.0	-	-
% Exports to:	-	0.7	-	-	-	-	99.5	99.3	-	-
France	-	1/	0.2	3.7	-	-	0.7	1.1	6.6	5.0
% Exports to:	-	1.3	4.6	42.2	-	-	4.1	2.7	48.1	17.0
Finland	-	0.6	-	0.4	-	2.2	-	-	-	-
% Exports to:	-	53.6	-	3.5	-	42.9	-	-	-	-
Denmark 2/	36.6	36.5	21.7	34.8	21.6	27.7	39.8	32.0	18.7	12.7
% Exports to:	78.5	73.9	7.6	8.1	7.7	12.6	2.4	1.5	1.5	0.9
Netherlands	4.0	5.4	39.2	43.9	37.0	28.5	4.3	4.7	3.1	3.5
% Exports to:	22.2	29.3	35.6	27.2	33.9	35.0	0.7	0.6	0.6	0.6
Sweden	-	0.4	11.8	6.9	13.7	12.2	0.1	0.1	-	-
% Exports to:	-	7.7	41.8	17.0	49.2	59.6	1/	1/	-	-
Argentina	1.5	2.7	9.5	5.7	8.8	6.7	7.2	2.1	-	-
% Exports to:	28.7	47.5	23.8	11.3	28.0	26.3	3.9	0.8	-	-
U. of South Africa	1/	0.1	-	-	-	-	-	-	-	-
% Exports to:	1.6	32.2	-	-	-	-	-	-	-	-
Australia	9.6	14.3	2.3	1.0	4.2	-	10.6	12.1	57.7	54.9
% Exports to:	83.3	83.4	2.8	0.7	5.1	-	2.2	1.6	15.8	10.9
New Zealand	48.3	40.0	15.3	1.5	14.7	22.6	35.1	43.3	13.6	21.9
% Exports to:	86.9	84.1	4.6	0.3	4.4	10.7	1.8	2.0	0.9	1.6
Total to: (1000 lbs.)	641,266	623,956	105,438	71,157	106,586	140,638	17,905	14,475	23,979	21,268
% Change 1953-1954	- 2.7		- 32.5		+ 31.9		- 19.2		- 11.3	
% of Total Trade	69.0	68.6	11.0	7.9	11.5	15.4	1.9	1.6	2.6	2.3

11 MAJOR EXPORTERS	SOUTH AMERICA		AFRICA		OCEANIA		OTHERS, n.s.		TOTAL		% OF TOTAL	
	1953	1954	1953	1954	1953	1954	1953	1954	1953	1954	1953	1954
	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	1000 Lbs.	1000 Lbs.	%	%
United States	2.7	11.0	0.1	1/	-	-	0.2	-				
% Exports to:	21.6	24.4	4.9	0.1	-	-	0.9	-	362	3,346	1/	0.4
Canada	1/	-	-	-	-	-	-	-				
% Exports to:	0.5	-	-	-	-	-	-	-	192	143	1/	1/
France	0.7	-	5.1	7.2	-	-	5.3	13.8				
% Exports to:	0.6	-	39.4	32.1	-	-	3.2	4.7	3,285	6,210	0.4	0.7
Finland	-	-	-	-	-	-	-	-				
% Exports to:	-	-	-	-	-	-	-	-	-	7,073	-	0.8
Denmark 2/	12.9	10.2	22.1	27.1	-	-	47.5	50.9				
% Exports to:	0.1	0.2	1.9	2.4	-	-	0.3	0.4	299,143	307,932	32.3	33.8
Netherlands	19.8	10.5	29.5	27.4	8.0	-	1.6	2.7				
% Exports to:	0.5	0.7	6.4	6.6	0.1	-	-	1/	116,226	114,685	12.6	12.6
Sweden	-	-	9.3	14.6	-	-	15.9	21.5				
% Exports to:	-	-	8.0	14.1	-	-	1.0	1.6	29,696	28,863	3.2	3.2
Argentina	48.7	59.2	6.9	1.9	-	-	4.9	-				
% Exports to:	4.2	12.3	5.1	1.5	-	-	0.3	-	33,585	35,737	3.6	3.9
U. of South Africa	-	-	0.6	6.2	-	-	8.1	11.0				
% Exports to:	-	-	47.0	59.8	-	-	51.4	8.0	302	2,864	1/	0.3
Australia	11.7	7.0	8.2	7.4	63.4	51.6	12.4	-				
% Exports to:	0.4	0.5	2.3	1.9	0.8	1.0	0.3	-	87,460	106,856	9.5	11.7
New Zealand	3.5	2.1	18.2	8.2	28.6	48.4	4.1	0.1				
% Exports to:	1/	0.1	1.3	0.8	0.1	0.4	1/	1/	355,986	297,121	38.4	32.6
Total to: (1000 lbs.)	2,879	7,433	25,187	27,645	1,079	2,159	1,915	2,099	926,237	910,830		
% Change 1953-1954	+ 158.2		+ 9.8		+ 100.1		+ 9.6		- 1.7			
% of Total Trade	0.3	0.8	2.7	3.0	0.1	0.2	0.9	0.2				

1/ Less than 0.05 percent.
2/ Does not include canned butter for which recent data is unavailable; usually amounts to less than 1 percent of total Danish butter exports.

TABLE II. Cheese: Pattern of Exports of Principal Exporting Countries by Area of Destination - 1953-1954

13 MAJOR EXPORTERS	UNITED KINGDOM		OTHER W. EUROPE		E. EUROPE		NORTH AMERICA		ASIA	
	1953	1954	1953	1954	1953	1954	1953	1954	1953	1954
	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From
United States	1/	1/	0.7	0.3	-	-	3.4	3.1	2.1	1.7
% Exports to:	0.2	1.0	32.3	19.1	-	-	40.6	40.7	5.1	4.9
Canada	4.4	1.4	0.1	0.1	-	-	1.8	1.1	-	1/
% Exports to:	90.1	80.2	1.9	4.0	-	-	7.9	15.5	-	0.1
Argentina	-	-	0.4	0.3	-	-	7.8	5.1	-	-
% Exports to:	-	-	12.4	10.4	-	-	53.8	48.1	-	-
Denmark	8.4	7.4	28.6	26.8	45.7	32.3	8.5	10.3	0.3	3.2
% Exports to:	21.0	16.1	62.3	62.2	5.8	8.9	4.5	5.5	1/	0.4
Finland	0.1	1/	6.0	2.4	17.7	40.8	0.6	1.3	0.2	0.2
% Exports to:	1.5	0.1	73.0	28.7	12.5	60.1	1.8	3.5	0.2	0.1
France	0.6	0.6	1.1	1.3	0.5	0.3	3.7	3.3	16.7	19.4
% Exports to:	5.0	4.0	8.5	9.4	0.2	0.3	7.2	5.6	6.4	7.3
Republic of Germany	0.1	0.1	2.7	4.0	-	-	0.3	0.3	0.7	1.5
% Exports to:	3.5	2.0	91.0	91.4	-	-	2.3	1.5	1.2	1.7
Italy	0.8	0.6	4.0	3.7	-	-	29.4	30.9	-	-
% Exports to:	6.6	4.7	30.5	29.7	-	-	55.2	57.3	-	-
Netherlands	7.3	5.9	44.9	48.0	33.6	19.3	12.4	14.0	21.0	28.2
% Exports to:	12.6	8.3	68.2	71.8	3.0	3.5	4.6	4.8	1.5	2.1
Sweden	1.5	0.3	1.3	2.0	2.0	6.9	0.1	0.1	-	-
% Exports to:	47.9	8.7	37.5	58.4	3.3	24.2	0.7	0.9	-	-
Switzerland	0.7	0.6	8.1	10.3	0.5	0.4	18.6	18.3	1.3	1.2
% Exports to:	5.6	3.3	57.8	65.9	0.2	0.3	32.6	26.9	0.4	0.4
Australia	11.8	14.9	0.5	0.2	-	-	0.9	0.6	55.3	43.4
% Exports to:	75.9	81.6	2.7	0.9	-	-	1.2	0.8	15.0	12.7
New Zealand	64.3	68.2	1.6	0.6	-	-	12.5	11.6	2.4	1.2
% Exports to:	93.5	94.7	2.0	1.0	-	-	3.9	3.9	0.1	0.1
Total: (1000 lbs.)	330,090	286,794	287,523	303,296	16,883	36,578	70,597	69,856	13,995	15,365
% Change 1953-1954	- 13.1		+ 5.5		+ 116.6		- 1.0		+ 9.8	
% of Total Trade	41.8	36.5	36.4	38.5	2.1	4.7	8.9	8.9	1.8	2.0

13 MAJOR EXPORTERS	SOUTH AMERICA				AFRICA				OCEANIA				OTHERS, n.s.				TOTAL		% OF TOTAL	
	1953		1954		1953		1954		1953		1954		1953		1954		1953	1954	1953	1954
	% Imp. From		% Imp. From		% Imp. From		% Imp. From		% Imp. From		% Imp. From		% Imp. From		% Imp. From		1,000 Lbs.	1,000 Lbs.	%	%
United States	8.9		8.0		1/		0.2		-		2.8		3.9		6.8					
% Exports to:		16.0		18.7		0.3		1.7		-		0.7		5.5		13.2	5,912	5,378	0.7	0.7
Canada	0.2		0.1		-		-		-		-		-		-					
% Exports to:		0.1		0.2		-		-		-		-		-		-	16,429	5,005	2.1	0.6
Argentina	25.2		22.7		1.2		0.2		-		-		2.2		1.1					
% Exports to:		26.1		38.7		5.9		1.2		-		-		1.8		1.6	10,218	7,418	1.3	0.9
Denmark	-		4.7		8.8		9.2		-		31.1		44.8		33.1					
% Exports to:		-		0.5		3.4		3.5		-		0.3		3.0		2.6	131,807	131,023	16.7	16.7
Finland	-		-		5.1		3.8		-		-		-		-					
% Exports to:		-		-		11.0		7.5		-		-		-		-	23,809	24,908	3.0	3.2
France	-		-		50.2		53.8		-		-		10.8		32.2					
% Exports to:		-		-		70.2		65.2		-		-		2.5		8.2	36,753	41,064	4.7	5.2
Republic of Germany	-		-		0.3		0.7		-		-		0.3		0.9					
% Exports to:		-		-		1.8		2.7		-		-		0.2		0.7	8,439	13,203	1.1	1.7
Italy	4.4		4.9		1.9		1.9		-		-		17.6		15.3					
% Exports to:		1.2		1.7		2.6		2.4		-		-		3.9		4.3	37,584	37,661	4.8	4.8
Netherlands	55.5		55.3		23.4		22.9		-		-		14.6		8.5					
% Exports to:		3.1		3.4		6.3		5.6		-		-		0.7		0.5	189,697	203,008	24.0	25.8
Sweden	-		-		1.3		1.4		-		-		4.9		0.9					
% Exports to:		-		-		6.6		6.9		-		-		4.0		0.9	10,326	10,379	1.3	1.3
Switzerland	2.3		1.8		2.0		1.8		24.2		21.3		0.2		1.0					
% Exports to:		0.6		0.5		2.5		1.9		0.3		0.6		1/		0.2	40,325	47,500	5.1	6.0
Australia	0.3		0.2		4.6		3.6		44.2		23.1		0.7		-					
% Exports to:		0.1		1/		4.6		3.4		0.4		0.6		0.1		-	51,625	52,546	6.5	6.7
New Zealand	3.2		2.3		1.2		0.5		31.6		21.7		-		-					
% Exports to:		0.2		0.1		0.2		0.1		0.1		0.1		-		-	227,047	209,838	28.7	26.7
Total: (1,000 lbs.)	10,590		12,647		51,426		49,611		480		1,326		8,386		10,458		789,971	785,931		
% Change 1953-1954	+ 19.4				- 3.5				+ 176.3				+ 25.7				- 0.5			
% of Total Trade	1.3		1.6		6.5		6.3		0.1		0.2		1.1		1.3					

1/ Less than 0.05 percent.

TABLE III. Canned Milk: Pattern of Exports of Principal Exporting Countries by Area of Destination - 1953-54

9 MAJOR EXPORTERS	UNITED KINGDOM		OTHER W. EUROPE		E. EUROPE		NORTH AMERICA		ASIA	
	1953	1954	1953	1954	1953	1954	1953	1954	1953	1954
	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From
United States	-	1/	17.5	0.4	-	-	31.6	37.4	20.8	19.0
% Exports to:	-	1/	13.5	0.2	-	-	18.9	24.3	63.2	73.0
Canada	-	-	0.6	0.6	-	-	15.2	6.3	0.1	0.1
% Exports to:	-	-	4.0	4.9	-	-	74.0	67.9	3.4	7.0
Netherlands	13.2	20.0	73.6	86.9	-	21.3	48.8	45.6	50.5	51.9
% Exports to:	1.6	0.2	18.9	12.8	-	1/	9.6	8.5	50.6	57.5
Switzerland	-	-	0.1	0.1	-	-	-	-	1.4	1.6
% Exports to:	-	-	0.9	1.0	-	-	-	-	70.0	75.4
United Kingdom	-	-	1.9	5.0	-	-	-	8.9	1/	5.6
% Exports to:	-	-	60.5	6.4	-	-	-	14.7	1.7	54.8
Australia	23.4	67.0	-	1/	-	-	0.7	0.3	11.6	7.2
% Exports to:	16.5	6.0	-	1/	-	-	0.8	0.5	69.5	84.4
New Zealand	17.2	-	-	-	-	-	0.1	0.1	2.8	2.2
% Exports to:	39.7	-	-	-	-	-	0.4	0.5	54.4	86.9
France	-	-	-	-	-	-	1.2	1.4	3.8	4.0
% Exports to:	-	-	-	-	-	-	3.4	3.6	60.3	64.0
Denmark	46.2	13.0	6.3	7.0	100.0	78.7	2.4	1/	9.0	8.4
% Exports to:	28.5	0.8	8.4	7.9	0.5	0.7	2.5	1/	46.9	70.6
Total: (1000 lbs.)	54,064	3,920	117,028	67,906	408	507	90,249	86,201	458,622	511,485
% Change 1953-1954	- 92.7		- 42.0		+ 24.3		- 4.5		+ 11.5	
% of Total Trade	6.3	0.5	13.7	8.3	1/	0.1	10.5	10.6	53.5	62.7

9 MAJOR EXPORTERS	SOUTH AMERICA		AFRICA		OCEANIA		OTHERS, n.s.		TOTAL		% OF TOTAL	
	1953	1954	1953	1954	1953	1954	1953	1954	1953	1954	1953	1954
	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	1,000 Lbs.	1,000 Lbs.	%	%
United States	17.5	10.1	1/	0.1	-	4.2	52.1	-				
% Exports to:	3.1	2.3	1/	0.1	-	0.1	1.3	-	151,214	132,827	17.6	16.3
Canada	11.8	5.1	0.3	0.1	-	-	-	1/				
% Exports to:	16.9	19.3	1.7	0.8	-	-	-	0.1	18,583	8,056	2.2	0.9
Netherlands	54.2	82.2	70.5	73.9	46.6	2.0	19.7	14.0				
% Exports to:	3.0	5.5	15.6	15.0	0.5	1/	0.2	0.5	457,805	461,544	53.4	56.7
Switzerland	-	-	2.6	2.7	-	-	1/	1/				
% Exports to:	-	-	29.1	23.6	-	-	1/	1/	9,039	10,613	1.2	1.3
United Kingdom	1.0	1.5	0.4	5.5	-	-	19.3	41.3				
% Exports to:	7.3	0.9	10.4	9.8	-	-	20.1	13.4	3,659	52,169	0.4	6.4
Australia	2.0	0.6	7.7	1.7	30.9	57.4	5.6	1/				
% Exports to:	0.7	0.4	10.2	3.6	1.9	5.1	0.4	1/	76,330	43,833	8.9	5.4
New Zealand	-	-	0.2	0.2	22.5	36.4	0.1	1/				
% Exports to:	-	-	1.0	1.8	4.5	10.8	1/	1/	23,549	13,223	2.7	1.6
France	0.3	0.5	10.3	10.6	-	-	3.2	1.4				
% Exports to:	0.3	0.5	35.7	31.2	-	-	0.3	0.7	29,146	31,975	3.4	3.9
Denmark	13.2	-	8.0	5.2	-	-	-	43.3				
% Exports to:	4.0	-	9.2	8.0	-	-	-	12.0	87,725	60,968	10.2	7.5
Total: (1,000 lbs.)	26,576	30,676	101,533	93,678	4,766	3,925	3,804	16,910	857,050	815,208		
% Change 1953-1954	+ 15.4		- 7.7		- 17.6		+ 344.5		- 4.9			
% of Total Trade	3.1	3.8	11.9	11.5	0.6	0.5	0.4	2.0				

1/ Less than 0.05 percent.

TABLE IV. Dried Milk: Pattern of Exports of Principal Exporting Countries by Area of Destination - 1953-1954

9 MAJOR EXPORTERS	UNITED KINGDOM		OTHER W. EUROPE		E. EUROPE		NORTH AMERICA		ASIA	
	1953	1954	1953	1954	1953	1954	1953	1954	1953	1954
	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From	% Imp. From
United States	0.1	0.1	1.9	1.1	-	-	37.5	37.1	58.4	64.3
% Exports to:	0.1	0.1	0.8	0.3	-	-	9.1	4.9	56.8	65.2
Canada	-	-	15.9	0.4	-	-	39.8	35.4	1.7	1.1
% Exports to:	-	-	25.7	0.9	-	-	37.2	37.2	6.5	9.1
Netherlands	1/	0.1	49.4	58.2	99.1	98.8	8.4	18.2	14.4	8.5
% Exports to:	1/	0.1	46.3	43.9	0.2	0.1	4.5	6.6	31.5	24.0
Sweden	-	-	4.1	3.0	-	-	2.2	0.4	3.1	0.6
% Exports to:	-	-	26.8	31.1	-	-	8.3	2.2	47.1	21.5
Switzerland	-	-	9.0	8.7	0.9	1.2	0.1	0.3	0.3	0.4
% Exports to:	-	-	69.8	61.5	1/	1/	0.4	1.1	5.9	11.6
United Kingdom	-	-	2.4	2.2	-	-	-	-	1.3	1.2
% Exports to:	-	-	30.5	18.1	-	-	-	-	37.8	35.1
Australia	23.7	20.4	1.0	3.4	-	-	1.7	3.6	13.3	14.0
% Exports to:	56.6	35.6	1.0	3.4	-	-	1.0	1.7	31.7	52.3
New Zealand	76.2	79.4	-	1/	-	-	10.3	5.0	4.6	5.9
% Exports to:	90.8	84.4	-	1/	-	-	3.1	1.5	5.5	13.4
Belgium	-	-	16.3	23.0	-	-	-	-	2.9	4.0
% Exports to:	-	-	50.1	58.4	-	-	-	-	20.5	38.2
Total: (1,000 lbs.)	140,039	93,263	60,355	53,810	107	83	34,985	25,953	140,251	200,512
% Change 1953-1954	- 33.4		- 10.8		- 32.4		- 25.8		+ 43.0	
% of Total Trade	30.2	19.6	13.0	11.3	1/	1/	7.5	5.5	30.4	42.2

9 MAJOR EXPORTERS	SOUTH AMERICA				AFRICA				OCEANIA				OTHERS, n.s.				TOTAL		% OF TOTAL	
	1953		1954		1953		1954		1953		1954		1953		1954		1953	1954	1953	1954
	% Imp. From		% Imp. From		% Imp. From		% Imp. From		% Imp. From		% Imp. From		% Imp. From		% Imp. From		1000 Lbs.	1000 Lbs.	%	%
United States	68.8		66.1		12.1		29.4		-		0.3		33.1		-					
% Exports to:		29.3		27.2		1.1		2.3		-		1/		2.8		-	144,121	197,726	31.1	41.6
Canada	16.1		15.3		11.7		3.3		-		0.7		-		0.2					
% Exports to:		26.4		50.6		4.2		2.1		-		0.1		-		1/	37,425	24,690	8.1	5.2
Netherlands	12.9		16.5		18.0		27.0		2.9		-		7.4		11.6					
% Exports to:		12.3		18.8		3.8		5.9		1/		-		1.4		0.6	64,313	71,346	13.8	15.0
Sweden	1.0		1.1		4.0		5.5		-		-		4.2		16.7					
% Exports to:		6.5		17.7		5.8		16.5		-		-		5.5		11.0	9,206	5,168	2.0	1.1
Switzerland	0.6		0.8		11.2		8.5		-		0.1		1/		-					
% Exports to:		4.5		8.3		19.3		17.5		-		1/		0.1		-	7,792	7,629	1.7	1.6
United Kingdom	1/		0.2		4.2		5.0		-		-		7.8		64.2					
% Exports to:		0.2		2.1		11.7		11.8		-		-		19.8		32.9	4,782	6,633	1.0	1.4
Australia	0.5		1/		35.7		16.2		74.3		80.9		1/		-					
% Exports to:		0.5		1/		8.2		4.7		1.0		2.3		1/		-	58,674	53,477	12.7	11.2
New Zealand	0.1		1/		3.1		2.1		22.8		18.0		1/		0.1					
% Exports to:		0.1		1/		0.3		0.4		0.2		0.3		1/		1/	117,550	87,786	25.4	18.4
Belgium	-		-		-		3.0		-		-		47.5		7.2					
% Exports to:		-		-		-		2.2		-		-		29.4		1.2	19,684	21,195	4.2	4.5
Total: (1,000 lbs.)	61,344		81,486		13,442		15,660		825		1,485		12,199		3,398		463,547	475,650		
% Change 1953-1954	+ 32.8				+ 16.5				+ 80.0				- 72.1				+ 2.6			
% of Total Trade	13.2		17.1		2.9		3.3		0.2		0.3		2.6		0.7					

1/ Less than 0.05 percent.